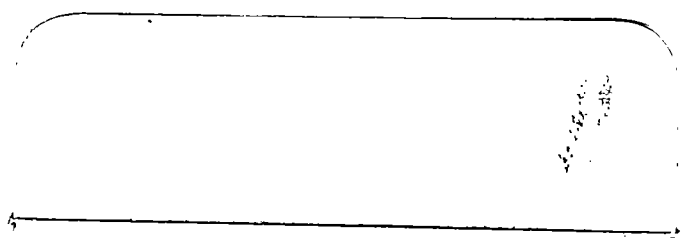
Operational Terms and Graphics



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OPERATIONAL TERMS AND GRAPHICS

PREFACE

How U S Army forces will fight the first and subsequent battles of the next war is fully described in the ***How-To-Fight*** series of field manuals.

In order to fight, commanders and their staffs must issue instructions to subordinates. That is, they must communicate the manner in which they wish operations to be conducted. Instructions or orders may be issued orally or in writing or by a combination of both. They may be issued in person or by electronic means. Words may be used as the principal means to communicate instructions, or sometimes only graphics are used to represent the intent of the commander.

As a general rule, both are used. One complements the other. In any case, a common language of tactics is necessary so instructions can be communicated rapidly and with minimum risk of misunderstanding.

This manual defines tactical terms and graphics used by the United States Army. It is designed to be used by commanders and staffs from company through corps to communicate instructions to subordinate units. Formats used to do this are fully described in ***FM 101—5, Staff Officer's Field Manual; Staff Organization and Procedure.***

The definitions and graphics defined herein conform as closely as possible to those expressed in ***JCS Publication, Dictonary of Military and Associated Terms; AR 310—25, Dictionary of United States Army Terms; AAP-6 (NATO Glossary of Terms and Definitions for Military Use); FM 21—30 Military Symbols;*** and ***STANAG 2019 (Military Symbols).*** Any conflicts between definitions in the basic references and language used in ***How-To-Fight*** manuals have been resolved by modification to best describe current US doctrinal application. Recommendations for improvement of this manual are encouraged; however, the terminology and graphics contained herein may not be changed until approved by the manual proponent. Comments should be keyed to a specific page, term, and line of the text and should contain reasons for each comment to insure proper evaluation. Use DA Form 2028 (Recommended Changes to Publications and Blank forms) in preparing comments and send the form direct to: Commander, US Army Combined Arms Center and Fort Leavenworth, ATTN: ATZLCA-DL, Fort Leavenworth, Kansas 66027.

Tactical terminology is listed in alphabetical sequence. Each term is defined and, where required, its current usage described. Graphical representation is shown and described as appropriate. To assist the reader in identifying other terms applicable to the same topic, an internal cross-reference is used. Similar terms are denoted after the words "See also" to refer the reader to the appropriate entries.

Chapter 2 contains an index of symbols used in offensive, defensive, and retrograde operations. The number of the page where each symbol is explained is contained within the hexagon adjacent to the symbol. As an aid in locating the definition on the page indicated, the hexagon symbol precedes the proper definition.

The word "he" or "his" in this publication is intended to include both the masculine and feminine genders and any exception to this will be so noted.

TABLE OF CONTENTS

		Page
Chapter 1	Terms	1-1
	A	1-1
	B	1-15
	C	1-23
	D	1-35
	E	1-43
	F	1-47
	G	1-55
	H	1-57
	I	1-59
	J	1-63
	K	1-65
	L	1-67
	M	1-71
	N	1-77
	O	1-79
	P	1-85
	Q	1-91
	R	1-93
	S	1-101
	T	1-109
	U	1-117
	V	1-119
	W	1-121
	Z	1-123
Chapter 2	Graphics	2-1
	Control Measures Commonly Employed In The Offense	2-1
	Control Measures Commonly Employed In The Defense	2-2
	Control Measures Commonly Employed In Retrograde Operations	2-3

Chapter 1
TERMS

Abatis . . . An antivehicular obstacle constructed by felling trees on both sides of a roadway in such a manner that they fall, interlocked, at a 45-degree angle to the roadway.

Accompanying supplies . . . The basic load of ammunition and the prescribed loads of other classes of supplies which are packaged and loaded by a unit or carried by individual soldiers. All classes of supplies taken into an objective area by the assault and followup echelons in an airborne operation.

Active air defense . . . Direct action taken to destroy attacking enemy aircraft or missiles or to nullify or reduce the effectiveness of such attack. It includes such measures as the use of aircraft, interceptor missiles, air defense artillery, nonair defense weapons in an air defense role, and electronic countermeasures.

See also: passive air defense, air defense.

Active defense . . . A flexible and elastic defense used by mechanized and armored forces. The concept of an active defense is to defeat the attacker by confronting him aggressively and continually with strong combined arms teams fighting from mutually supporting battle positions organized in-depth.

See also: covering force area, main battle area, rear area.

Advance guard . . . The lead element of an advancing force. It may or may not be preceded by a separate covering force. Its primary mission is to insure the uninterrupted advance of the main body. In the absence of a covering force, it has the following additional functions:

1. To find and exploit gaps in the enemy's defensive system;
2. To prevent the main body of the advancing force from running blindly into enemy positions; and
3. To clear away minor opposition or, if major opposition is met, to cover the deployment of the main body.

See also: covering force, security operations.

Aerial reconnaissance . . . Operations conducted from aircraft to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or potential enemy; or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area.

Airborne force . . . A force composed primarily of ground and air units organized, equipped, and trained for delivery by airlanding or airdrop into an area to conduct combat operations.

General airborne symbol.

Airborne symbol used to depict the 82d Airborne Division.

Airborne operation . . . An operation involving movement and delivery by air of combat forces and their logistic support into an area for tactical or strategic purposes. The means employed may be any combination of airborne units, air transportable units, and types of transport aircraft. Airborne operations are executed in four phases: mounting phase, air movement phase, assault phase, and subsequent operations phase.

See also: airmobile operation, ground tactical plan, landing plan, air movement plan, and marshaling plan.

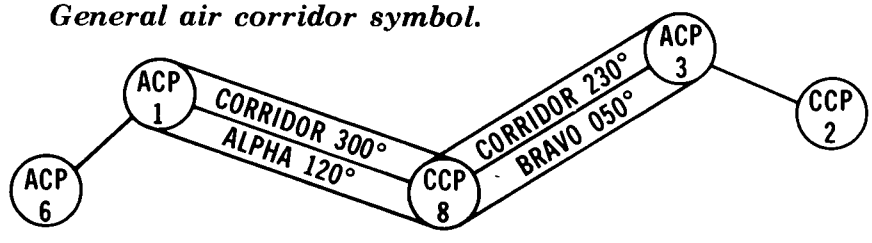
Air control point (ACP) . . . An easily identifiable point on the terrain or an electronic navigational aid used to provide necessary control during air movement. ACPs are generally designated at each point where the flight route makes a definite change in direction and any other point deemed necessary for timing or control of the operation.

General air control point symbol.

See also: communications checkpoint (CCP).

Air corridor . . . A prescribed air route for aircraft established to prevent friendly aircraft from being fired on by friendly forces.

General air corridor symbol.



See also: air control point, communications checkpoint.

Air defense . . . All measures designed to nullify or reduce the effectiveness of enemy attack aircraft or guided missiles in flight.

See also: active air defense, passive air defense.

Air defense warnings . . . Warnings normally issued after the highest Defense Readiness Condition (DEFCON) has been declared and represent the air defense commander's evaluation of the probability of air attack. Standard air defense warnings are:

WHITE. Attack not probable.

YELLOW. Attack probable.

RED. Attack imminent or in progress.

See also: active air defense, air defense weapons control status.

Air defense weapons control status . . . Three degrees of weapons fire control used by a commander to control the fires of his organic air defense weapons. Categories include:

Weapons free. An air defense weapons control status normally used in the combat zone under which fire at any aircraft not positively identified as friendly is authorized. Under this status, aircraft of unknown or doubtful identification may be engaged.

Weapons tight. An air defense weapons control status normally used in the combat zone under which fire is restricted to aircraft positively identified as hostile according to the prevailing hostile criteria. Under this status, aircraft of unknown or doubtful identification may not be engaged.

Weapons hold. An air defense weapons control status normally used in the combat zone to restrict fire at aircraft except in self-defense.

Airdrop . . . Delivery of personnel or cargo from aircraft in flight.

See also: air movement.

Air-ground operations system (AGOS) . . . An Army-Air Force system which provides the ground commander with the means for receiving, processing, and forwarding the requests of subordinate ground commanders for air support missions and for the rapid dissemination of information and intelligence. It includes personnel, equipment procedures, and techniques comprising the ***Army*** air-ground system (AAGS) and the ***Air Force*** tactical air control system (TACS).

See also: Army air-ground system (AAGS), tactical air control system (TACS).

Airhead . . . A designated area in a hostile or threatened territory which, when seized and held, insures the continuous landing (parachute or airland) of troops and materiel and provides maneuver space for operations. Normally, it is the area seized in the assault phase of airborne and airmobile operations.

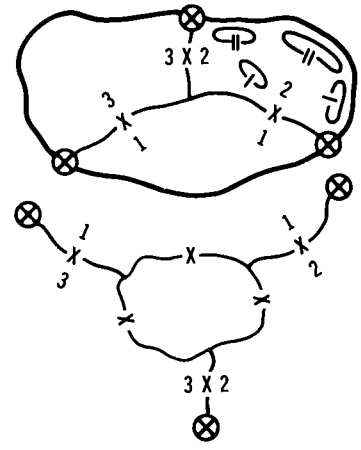
Graphical Representation: See airhead line.

Airhead line . . . A line which marks the outside limit of that part of the airhead to be denied to the enemy.

May be used as a control measure to delineate the location of battle positions when forces are deployed linearly in sector as in a perimeter defense.

—or—

May be used to limit the depth of enemy penetrations when units defend in depth. In this case, the airhead line can constitute brigade rear boundaries.



Air interdiction . . . Air operations conducted to destroy, neutralize, or delay the enemy's military potential before it can be brought to bear effectively against friendly forces. It is conducted at such distance from friendly forces that detailed integration of each air mission with the fire and movement of friendly forces is not required.

See also: battlefield air interdiction, offensive air support (OAS), tactical air support.

Air landed . . . Air movement of troops and materiel in which they are disembarked or unloaded after the aircraft has landed or while a helicopter is hovering.

See also: air movement.

Air liaison officer (ALO) . . . The senior Air Force officer at each Tactical Air Control Party (TACP). He advises the Army commander on all aspects of the employment of tactical air power to include tactical airlift, tactical reconnaissance, battlefield interdiction, and close air support. He serves as the focal point for Air Force coordination in joint air/ground operations and assists in the planning for tactical air support of ground

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By Order of the Secretary of the Army:

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General, United States Army
Chief of Staff

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Major General, United States Army
The Adjutant General

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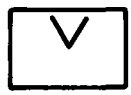
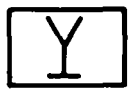
operations. The ALO supervises the activities of TACP personnel and is responsible for all subordinate TACPs.

See also: tactical air control party (TACP).

Air maneuver forces . . . Air cavalry and attack helicopter units that operate in the ground environment. They engage targets by fire from covered and concealed positions. Their operations are similar to ground combat operations in that they tailor their movement to the terrain and use suppressive fires. These units are integrated into the tactical plan of the ground force commander. They can dominate terrain by denying the enemy its use by direct aerial fire for limited periods of time.

See also: combat maneuver force.

Airmobile operation . . . An operation in which combat forces and their equipment move about the battlefield in Army aircraft, under the control of the ground force commander, to engage in ground combat. Airmobile operations are conducted in four phases: the loading phase, the air movement phase, the landing phase, and the ground operations phase.

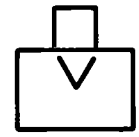
General symbol, airmobile unit.	
General symbol, Army aviation.	
Denotes units organic to airmobile organizations and trained in airmobile operations.	
Denotes airmobile force with sufficient organic helicopters to conduct airmobile operations.	
Denotes the aviation unit within an airmobile force.	

Airmobility . . . A capability of airmobile forces which permits them to move by air while retaining the ability to engage in ground combat.

See also: air transportable unit.

Airmobile task force (AMTF) . . . A grouping of aviation and ground units under one commander for the purpose of carrying out a specific operation.

General airmobile task force symbol.



Airmobile force with organic helicopters.

Airmobile task force commander . . . The senior ground commander responsible for the overall conduct of an airmobile operation.

Air movement . . . Air transport of units, personnel, supplies, and equipment including airdrops and air landings.

Air movement phase . . . The second phase of an airborne or airmobile operation which begins with the takeoff of loaded aircraft from departure areas and ends with the delivery of units to their drop or landing zones.

See also: airborne operations, airmobile operations.

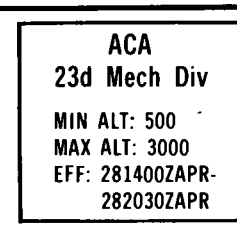
Air movement plan . . . An airborne plan prepared jointly by the ground and airlift units covering that phase of an airborne or airmobile operation from the time units have loaded aircraft until they arrive in the objective area. It indicates unit loading times at specific departure airfields or pickup zones and includes takeoff time, flight routes, order of flight, and arrival time over drop zones or landing zones. It is usually published as an annex to the operations plan.

See also: ground tactical plan, landing plan, marshaling plan.

Airspace coordination area (ACA) . . . A three-dimensional block of airspace in a target area in which friendly aircraft are reasonably safe from friendly surface fires. May be imposed by division or higher level commanders and constitutes a restrictive fire control measure when in effect.

General ACA symbol.

(Rectangle outline is colored red.)



Airspace management . . . The coordination, integration, and regulation of the use of airspace of defined dimensions.

Airspace management element (AME) . . . An Army element within corps (CAME) and division (DAME) tactical operations centers responsible for the coordination, integration, and regulation of airspace within the organization's area of territorial responsibility. It coordinates directly with Air Force elements integrated into each tactical operations center.

Air strike . . . An attack on specific targets by fighter, bomber, or attack aircraft.

Air transportable unit . . . A unit, other than airborne, whose equipment is adapted for air movement.

See also: airmobility.

Allocation (tactical air support resources) . . . The designation, by the Air Force component commander, of specific numbers and types of sorties available for tactical air support, air interdiction, and counterair missions during a specified period. Upon notification of the allocation, the Army component commander suballocates portions of the available tactical air support sorties to subordinate commands by number of sorties available to each.

See also: apportionment, tactical air operations.

Allocation (nuclear) . . . The specific numbers and types of nuclear weapons allocated to a commander for a stated time period as a planning factor only.

Allocation of forces . . . The designation of specific units and other resources to subordinate commands to carry out a given tactical scheme. May include assignment, attachment, or operational control (OPCON), direct support, reinforcing, and general support.

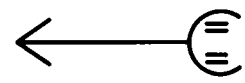
Alpha particle . . . A particle emitted from the nuclei of some radioactive elements. It is identified as a helium nucleus which has an atomic weight of four and an electric charge of plus two. Not generally of military significance.

Alternate command post . . . A location designated by a commander to assume command post functions in the event the primary command post becomes inoperative. It may be partially or fully equipped and manned, or it may be the command post of a subordinate unit.

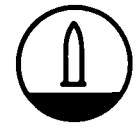
Alternate position . . . A place located generally adjacent to the primary position from which a weapon, a unit, or an individual can perform the original task when the primary position becomes untenable or unsuitable.

See also: battle position, delay on alternate positions, position, primary position, successive positions, supplementary positions.

Ambush . . . A surprise attack by fire from concealed positions on a moving or temporarily halted enemy.

Point of arrow at map location. 

Ammunition supply point (ASP) . . . A point at which ammunition is available for distribution to using units on an area basis. It is normally operated by an ordnance unit organic to the corps.

Symbol for an ammunition supply point handling all types of ammunition. Specific types of munitions may be denoted by entering the appropriate symbol inside the artillery shell. 

Amphibious operation . . . An attack launched from the sea by naval and landing forces, embarked in ships or craft, and involving a landing on a hostile shore.

Apportionment (tactical air support resources) . . . The decision by the joint force commander on the division of tactical air resources among the combat functions of counterair, air interdiction, and tactical air support. It is expressed in terms of percentages of assets to be devoted to each function and is based, in part, on the recommendations of the Army and Air Force component commanders.

See also: allocation (tactical air support resources).

Area damage control . . . Measures taken before or after hostile actions, or natural or manmade disasters, to reduce the probability of damage and minimize its effects.

See also: rear area combat operations (RACO).

Area of influence . . . The portion of the assigned zone and the area of operations wherein a commander is directly capable of influencing the progress or outcome of operations by maneuvers of his ground-gaining elements or by delivery of firepower with the fire support systems normally under his control or command. It is a geographical area the size of which depends upon the mission, organization, and equipment of the force involved.

Area of interest . . . That area of concern to the commander, including the area of influence, areas adjacent thereto, and areas extending into enemy

territory to the objectives of current or planned operations. This also includes areas occupied by enemy forces who could jeopardize the accomplishment of the mission.

See also: tactical intelligence zones.

Area of operations . . . That portion of an area of war necessary for military operations, either offensive or defensive, pursuant to an assigned mission, and for the administration incident to such military operations.

Area of responsibility . . . That land area assigned to a force commander for the development of installations, control of movement, and the conduct of tactical operations of his command.

Area reconnaissance . . . A directed effort to obtain detailed information concerning the terrain or enemy activity within a prescribed area such as a town, ridge line, woods, or other feature critical to operations.

See also: route reconnaissance, zone reconnaissance.

Armed reconnaissance . . . An air mission flown with the primary purpose of locating and attacking targets of opportunity (i.e., enemy materiel, personnel, and facilities) in assigned general areas or along assigned ground communications routes, and not for the purpose of attacking specific briefed targets.

Army air-ground system (AAGS) . . . The Army system which provides the interface between Army and tactical air support agencies of other services in the planning, evaluating, processing, and coordinating of air support requirements and operations. It extends from the highest Army echelon to the maneuver battalion level and consists of operations, intelligence, logistics, and liaison personnel and their facilities and equipment that are used in planning, evaluating, processing, and coordinating air support requirements and operations. It is composed of appropriate staff members, including G2 and G3 air personnel, and necessary communications equipment.

Assailable flank . . . The flank of a unit which is vulnerable to attack by virtue of terrain, unit positioning, or adjacent unit location. An assailable flank may be created by fires or maneuver.

Assault . . . 1. The culmination of an attack which closes with the enemy. 2. In an amphibious operation, the period of time from the crossing of the line of departure by the first scheduled wave to the seizure of the initial objectives. 3. A phase of an airborne and airmobile operation beginning with delivery of the assault force into the objective area and extending through the attack of

objectives and consolidation of the initial airhead. 4. In river crossings, the period of time from the launching of the first crossing effort until the bridgehead has been secured and responsibility passed to the crossing area commander.

See also: fighting through, assault fires.

Assault breach . . . The breach of an obstacle or obstacles characterized by the rapid employment of breaching techniques to take advantage of a situation. It will normally be conducted by combat elements without engineer aid or assistance.

See also: mobility operations, breach, breaching force, deliberate breach.

Assault echelon . . . 1. Those forces required in the initial stages of an airborne or river crossing operation to secure the assault objectives. 2. One or more units of an attacking force used to begin and lead the attack.

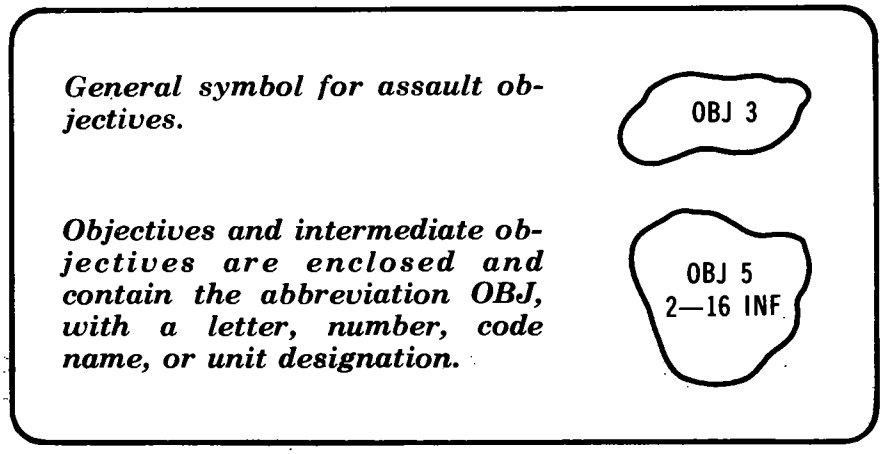
See also: followup echelon, rear echelon.

Assault fire . . . 1. Fire delivered by attacking forces as they close with an enemy in order to suppress his defensive fires. 2. Extremely accurate, short-range artillery fire for the destruction of point targets.

Assault force . . . 1. In an amphibious or airborne operation, those units charged with the seizure of the lodgment area. 2. In offensive river crossing operations, the major subordinate units conducting the assault to, across, and beyond the water obstacle. Assault forces lead, making the initial assault of the river and continuing the advance from the exit bank to the final objectives.

See also: airhead, beachhead, bridgehead.

Assault objectives . . . Key terrain features whose immediate seizure facilitates the overall accomplishment of an airborne operation.



Assault phase . . . 1. That phase of an airborne, airmobile, amphibious, or river crossing operation that begins with the delivery of the assault forces into the objective area and ends when all assault objectives have been seized. 2. That period during an attack which begins when the assault forces advance from their assault positions and ends when the objective has been seized and consolidated.

See also: airborne operation, airmobile operation.

Assault position . . . That position between the line of departure and the objective in an attack from which forces assault the objective. Ideally, it is the last covered and concealed position before reaching the objective (primarily used by dismounted infantry).

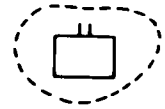
Assault positions are enclosed and contain the abbreviation ASLT PSN, with a letter, number, code name, or a unit designation.

Assembly area . . . An area in which a force prepares or regroups for further action.

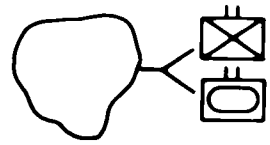
Assembly area may be designated by numbers, letters, code names, or unit designations.

Occupied assembly area.

Planned assembly area for a battalion.



Unit symbols displaced to indicate an assembly area for a group of units.



Assign . . . The placement of units or personnel in an organization where such placement is relatively permanent and/or where such organization controls and administers the units or personnel for the primary function, or greater portion of the functions, of the unit or personnel.

See also: attach, operational control (OPCON), organic.

Attach . . . The placement of units or personnel in an organization where such placement is relatively ***temporary.*** Subject to limitations imposed by the attachment order, the commander of the formation, unit, or organization receiving the attachment will exercise the same degree of command and control thereover as he does over units and persons organic to his command. However, the responsibility for transfer and promotion of personnel will normally be retained by the parent formation, unit, or organization.

See also: assign, operational control (OPCON), organic.

Attack . . . An offensive action characterized by fire and maneuver and culminating in a violent assault or, in an attack by fire, in the delivery of intensive direct fires from an advantageous position. Its purpose is to direct a decisive blow at the enemy to hold him, destroy him in place, or force him to capitulate.

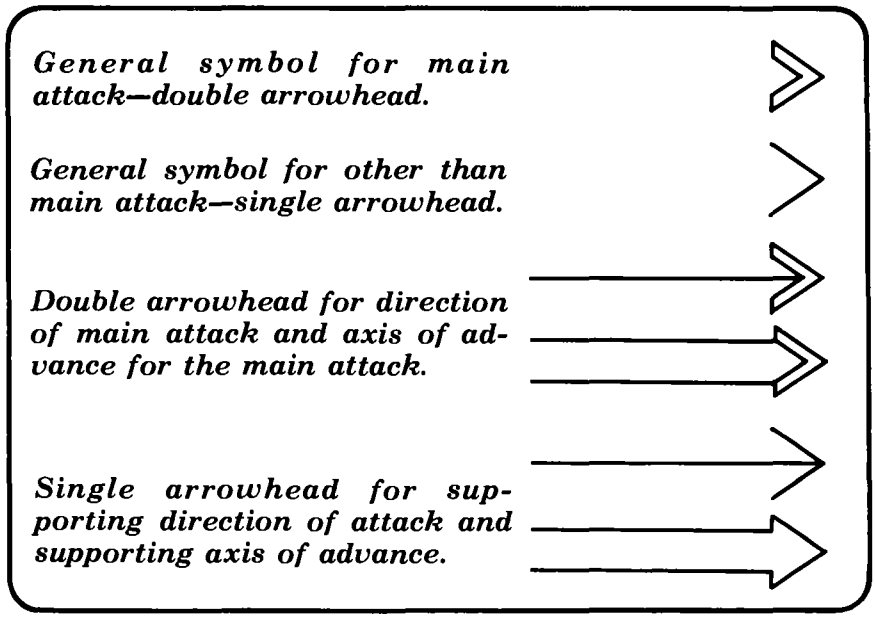
Deliberate attack . . . An attack planned and carefully coordinated with all concerned elements on the basis of thorough reconnaissance, evaluation of all available intelligence and relative combat strength, analysis of various courses of action, and other factors affecting the situation. It is generally conducted against a well-organized defense when a hasty attack is not possible or has been conducted and failed. *Replaces coordinated attack.*

Hasty attack . . . An offensive operation usually conducted following a movement to contact, for which a unit has not made extensive preparations. It is conducted with the resources immediately available in order to maintain momentum.

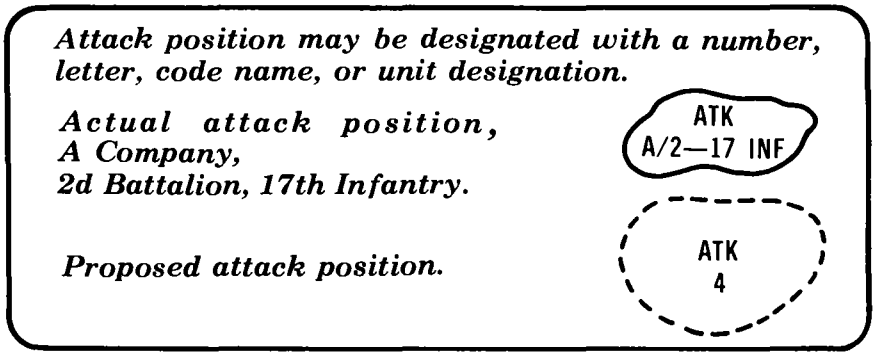
Main attack . . . The principal attack or effort into which a commander throws the bulk of the offensive combat power at his disposal. An attack directed against the chief objective of the campaign or battle.

Spoiling attack . . . A limited-objective attack made to delay, disrupt, or destroy the enemy's capability to launch an attack.

Supporting attack . . . An attack designed to hold the enemy in position, to deceive him as to where the main attack is being made, to prevent him from reinforcing the elements opposing the main effort, and/or to cause him to commit his reserves prematurely at an indecisive location. (Synonymous with holding attack.)



Attack position . . . The last position an attacking force may occupy before crossing the line of departure.



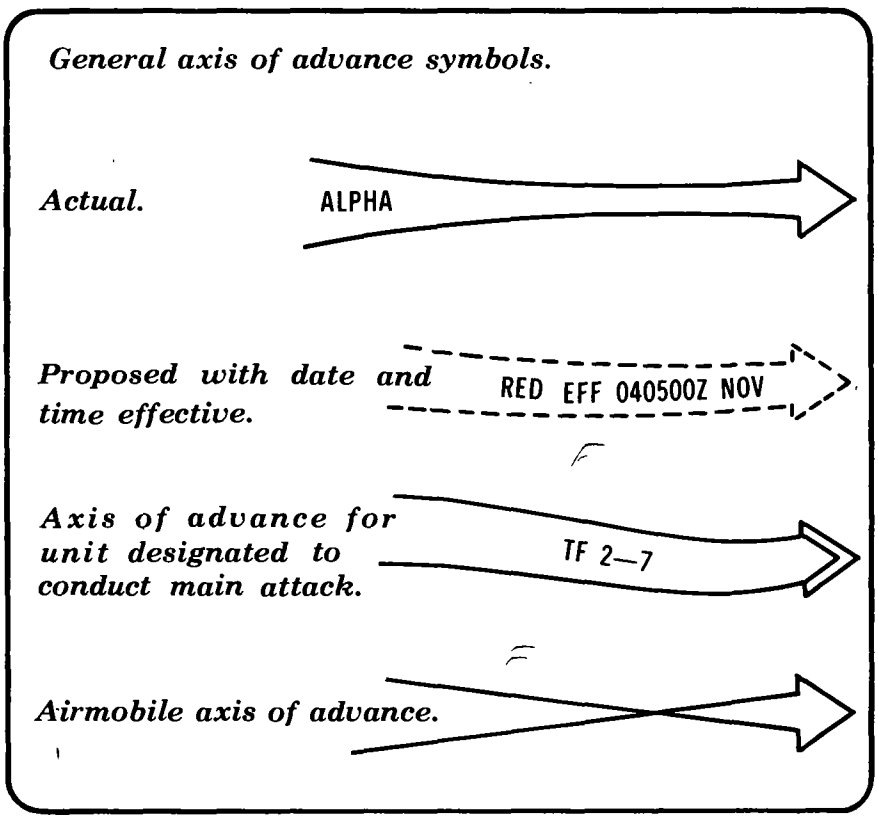
Attrition . . . The reduction of the effectiveness of a force caused by loss of personnel or materiel.

Avenue of approach . . . An air or ground route of an attacking force of a given size leading to its objective or to key terrain in its path.

Axis of advance . . . A general route of advance extending in the direction of the enemy which is assigned for purposes of control. An axis of advance symbol graphically portrays a commander's intention (e.g., avoidance of built-up areas, envelopment of an emeny force). It follows terrain suitable for the size of the force assigned the axis and is often a road, a group of roads, or a designated series of locations. A commander may maneuver his forces and

supporting fires to either side of an axis of advance provided the unit remains oriented on the ***axis*** and the ***objective.*** Deviations from an assigned axis of advance must not interfere with the maneuver of adjacent units without prior approval of the higher commander. Enemy forces that do not threaten security or jeopardize mission accomplishment may be bypassed. An axis of advance is not used to direct the control of terrain or the clearance of enemy forces from specific locations. Intermediate objectives are normally assigned for these purposes.

See also: direction of attack, zone of attack, attack.



B

Barrier study . . . A study performed at echelons above corps based on analysis of the terrain and a broad concept for future operations in an area. It is designed to determine the most effective use of existing and reinforcing obstacles and the area's potential for combat operations.

Base of fire . . . Fire placed on an enemy force or position to reduce or eliminate its capability to interfere by fire and/or maneuver with the movement of friendly maneuver element(s). It may be provided by a single weapon or a grouping of weapon systems.

Basic load (ammunition) . . . That quantity of nonnuclear ammunition authorized to be on hand in a unit to meet combat needs until resupply can be accomplished. Size of the basic load is normally determined by corps or the major overseas commander.

Battalion task force . . . A force generally organized by combining tank and mechanized infantry elements under a single battalion commander to conduct specific operations. A battalion task force may be tank-heavy, mechanized infantry-heavy, or balanced, depending on the concept and plan of operation.

General task force symbol.

Mechanized infantry battalion task force.

Battlefield air interdiction (BAI) . . . Is air action against hostile ground targets which are positioned to directly affect friendly forces and which require joint allocation, planning, and coordination. BAI missions will require joint planning and coordination but may not require continuous coordination during the execution stage.

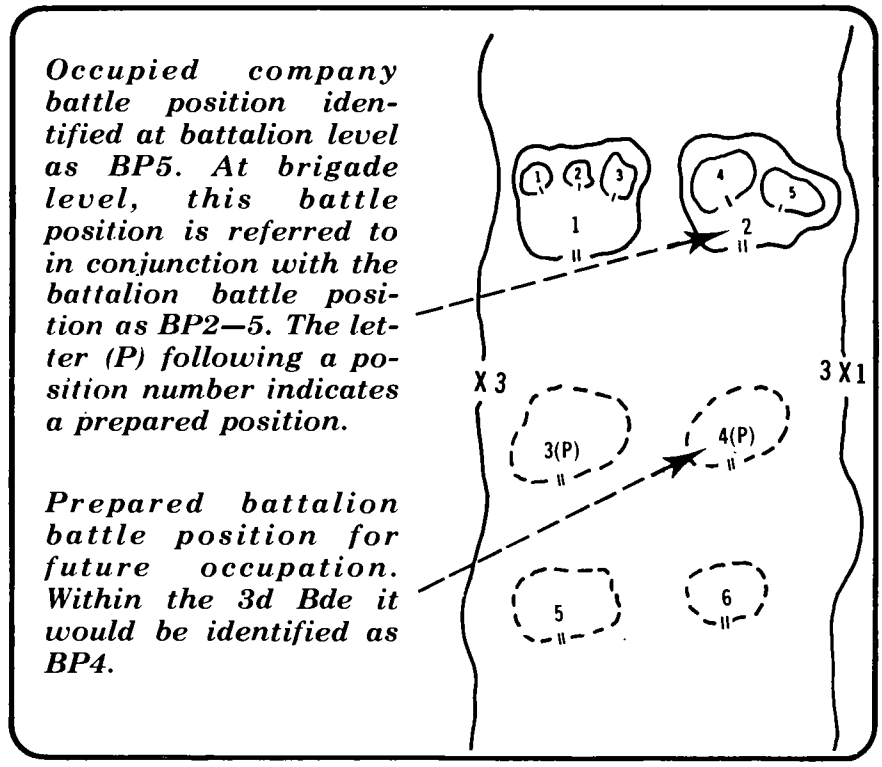
Battle position (BP) . . . A defensive location on the ground selected on the basis of terrain and weapon analysis from which units can defend or attack. Such units can be as large as battalion task forces and as small as platoons. A unit assigned a battle position is located within the general outline of the battle position. Some security forces may operate outside battle positions for early enemy detection and all-around security. A battle position symbol represents a positioning technique. The symbol indicates direction of force orientation.

Designation Method

Battalion battle positions may be uniquely designated by number within the corps using blocks of numbers allocated each division. Proposed positions may be numbered sequentially with occupied positions.

Company battle positions may be designated numerically and are identified by the number assigned by the parent unit. When the company battle position is referenced outside of the battalion, its complete designation is used. This is accomplished by using the parent unit designation followed by a dash (—) and the company battle position number (e.g., BP 7—2).

Platoon battle positions are designated by unit SOP.

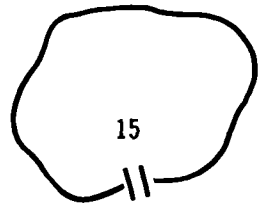
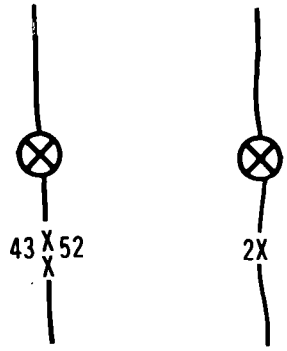


Occupied company battle position identified at battalion level as BP5. At brigade level, this battle position is referred to in conjunction with the battalion battle position as BP2—5. The letter (P) following a position number indicates a prepared position.

Prepared battalion battle position for future occupation. Within the 3d Bde it would be identified as BP4.

See also: boundary, sector.

Comparison defensive control measures . . .

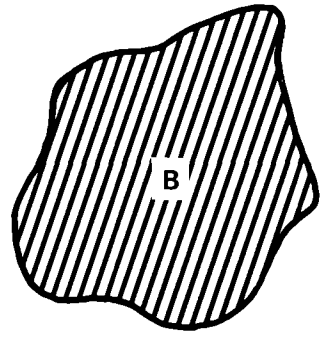
	Battle Position	Sector
Graphic symbol		
Unit level at which normally employed	Plt-Bn	Co-Corps
Assignment authority	Co-Bn- Bde-Div	Bn-Bde-Div- Corps
Distances between positions/ sectors	Terrain dependent—mutually supporting.	Shared boundaries (contiguous).
How used	To take advantage of defensive terrain. To align units for target servicing. To concentrate forces.	When enemy situation is unclear. To cover the entire front. To give the commander maximum flexibility.

Beachhead . . . A designated area on a hostile shore which, when seized and held, insures the continuous landing of troops and materiel and provides maneuver space requisite for subsequent projected operations ashore. It is the physical objective of an amphibious operation.

See also: airhead, amphibious operation, bridgehead.

Biological agent . . . A micro-organism which causes diseases in man, plants, or animals or causes the deterioration of materiel.

Biologically (B) contaminated areas. The symbol is shown in yellow, *and the letter B is written in the center.*



Blast effect . . . Destruction or damage caused by the shock wave of an explosion, particularly a nuclear explosion.

Boobytrap . . . A device designed to kill or maim an unsuspecting person who disturbs an apparently harmless object or performs a presumably safe act.

General boobytrap symbol.

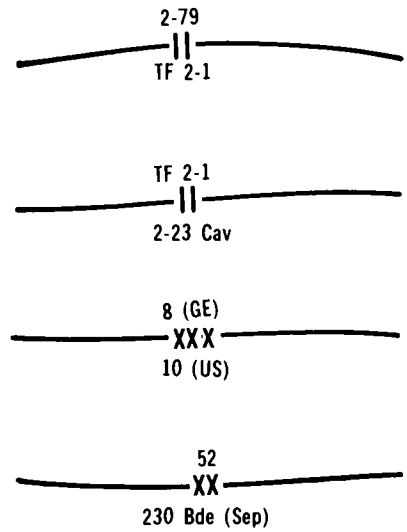
Bound . . . 1. Single movement, usually from one covered and concealed position to another by dismounted troops or combat vehicles. 2. Distance covered in one movement by a unit which is advancing by bounds.

Boundary . . . A control measure drawn along identifiable terrain features and used to delineate areas of tactical responsibility for subordinate units. Within their boundaries, units may fire and maneuver in accordance with the overall plan without close coordination with neighboring units unless otherwise restricted. Direct fire may be placed across boundaries on clearly identified enemy targets without prior coordination, provided friendly forces are not endangered. Indirect fire may also be used after prior coordination.

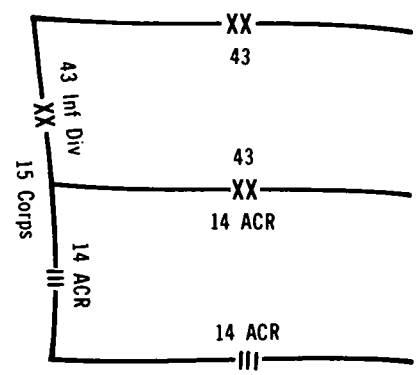
Lateral boundaries are generally used by corps or division to control combat operations. Lateral boundaries may be used by smaller units when required.

Rear boundaries may be established in defense to facilitate command control.

Lateral boundaries *are lines with a symbol placed on the boundary to show size and designation of the highest echelons that have the boundary in common. If the units are of unequal size, the symbol of the higher units is shown and the designation of the lower unit is given completely.*



When used, a rear boundary *shows the size symbol for the small or subordinate unit rather than that of the larger unit of which it is a part.*



Bounding overwatch. . . See movement technique.

Breach . . . The employment of any means available to break through or secure a passage through an enemy defense, minefield, or fortification.

See also: mobility operations, assault breach, deliberate breach, breaching force.

Breaching force . . . A group of personnel or a unit engaged in breaching operations.

See also: mobility operations, breach, assault, deliberate breach.

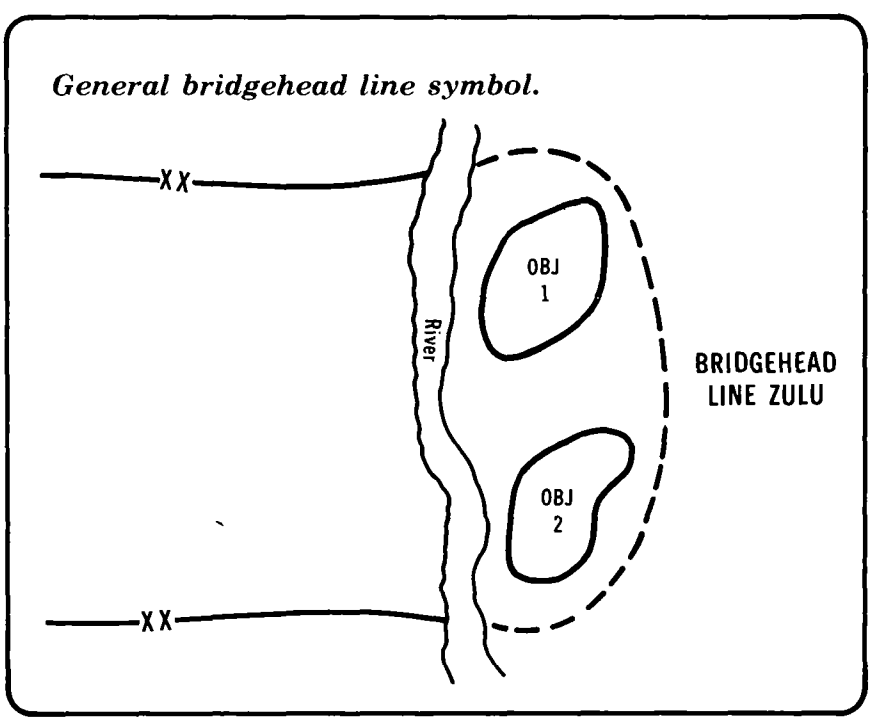
Breakout . . . An offensive operation conducted by an encircled force. A breakout normally consists of an attack by a penetration force to open a gap through the enemy for the remainder of the force to pass.

Breakthrough . . . An offensive action which has the purpose of rupturing the enemy's forward defenses to permit the passage of an exploitation force.

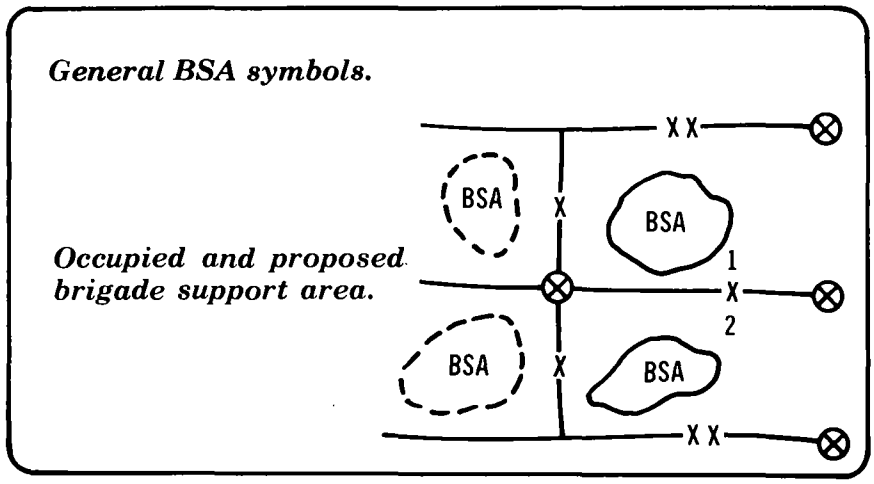
Bridgehead . . . 1. An area of ground held or to be gained on the enemy's side of an obstacle. 2. In river crossing operations, an area on the enemy's side of the water obstacle that is large enough to accommodate the majority of the crossing force, has adequate terrain to permit defense of the crossing sites, and provides a base for continuing the attack. As a minimum, ground which would permit observed indirect fires on the crossing site must be secured.

See bridgehead line, holding line.

Bridgehead line . . . In offensive river crossing operations, the limit of the objective area in the development of the bridgehead.



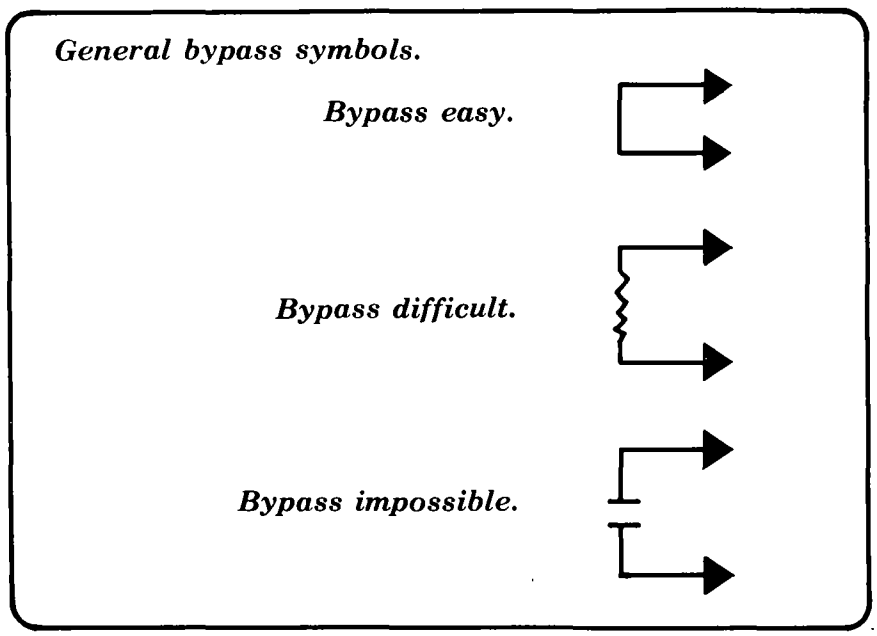
Brigade support area (BSA) . . . A control measure used to designate the location of brigade trains and brigade headquarters company elements not required in the main command post.



See also: division support area.

Built-up area . . . A concentration of structures, facilities, and population.

Bypass . . . Maneuvering around an obstacle, position, or enemy force in order to maintain the momentum of advance. Previously unreported obstacles are reported to higher headquarters. Bypassed enemy forces must be reported to higher headquarters.



C

Camouflage . . . Concealment and disguise to minimize enemy detection or identification of troops, weapons, equipment, and installations. It includes taking advantage of the immediate environment as well as using natural and artificial materials.

See also: cover, concealment, operations security (OPSEC).

Canalize . . . To restrict operations to a narrow zone by use of existing or reinforcing obstacles or by fire or bombing.

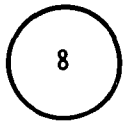
Cannibalization . . . The removal of serviceable parts and assemblies from unserviceable equipment to repair similar items.

Capture . . . The taking into custody of a hostile force, equipment, or personnel as a result of military operations.

Chaff . . . Thin, narrow metallic strips of various lengths and frequency responses used to reflect electronic echoes for confusion purposes on radar screens.

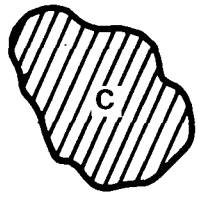
Checkpoint . . . A predetermined point on the ground used as a means of controlling friendly movement. Checkpoints are not used as reference points in reporting enemy locations.

Checkpoints may be identified by number, letter, or code word.



Chemical agent . . . A chemical substance intended for use in military operations to kill, seriously injure, or incapacitate through its physiological effects. Excluded are riot control agents, herbicides, smoke, and flame.

Chemically (C) contaminated areas. The symbol is shown in yellow and the letter C is written in the center.



Chemical warfare . . . The employment of chemical agents to: 1. Kill, injure, or incapacitate men or animals for a significant period of time. 2. Deny or hinder the use of areas, facilities, or materiel.

Circular distribution 90 (CD90) . . . The radius of a circle around the mean point of impact within which a single round has a 90 percent probability of impacting or within which 90 percent of the rounds fired will impact.

See also: circular error probable.

Circular error probable (CEP) . . . The radius of a circle around the mean point of impact within which a single round has a 50 percent probability of impacting.

See also: target oriented analysis, circular distribution 90, desired ground zero.

Classes of supplies . . . The grouping of supplies, by type, into ten categories to facilitate supply management and planning. Major classes are:

Class I. Rations and gratuitous issue of health, morale, and welfare items.

Class II. Clothing, individual equipment, tentage, tool sets, administrative and housekeeping supplies and equipment.

Class III. Petroleum, oil, and lubricants.

Class IV. Construction materials.

Class V. Ammunition.

Class VI. Personal demand items sold through post exchanges.

Class VII. Major end items such as tanks, armored personnel carriers, and attack helicopters.

Class VIII. Medical.

Class IX. Repair parts and components for equipment maintenance.

Class X. Nonstandard items to support nonmilitary programs such as agriculture and economic development.

Clear enemy in zone . . . A requirement to eliminate organized resistance from an assigned zone by destroying, capturing, or forcing the withdrawal of enemy forces that could interfere with the unit's ability to accomplish its mission. If the commander's desire is the clearance of enemy forces, the statement "clear enemy in zone" is included as a specified task in the mission statement.

See also: attack, zone of attack, destroy enemy in zone.

Close air support (CAS) . . . Air attacks against hostile targets which are in the proximity of friendly forces and which require detailed integration of each air mission with the fire and maneuver of those forces.

See also: tactical air support.

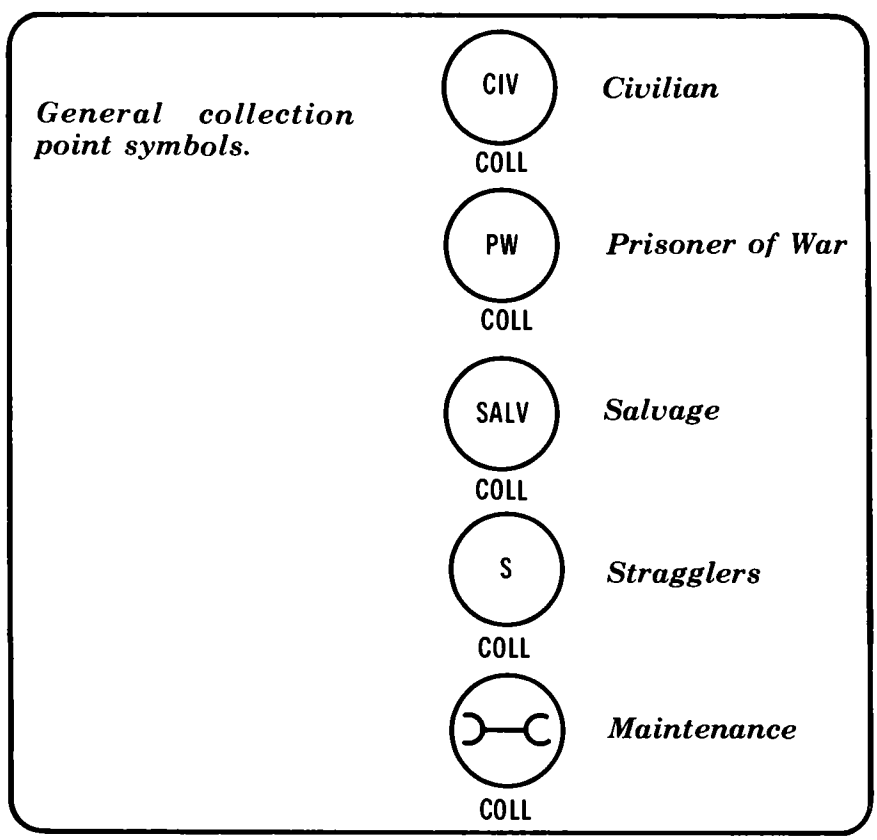
Collateral damage . . . Undesirable civilian personnel injuries or materiel damage produced by the effects of friendly nuclear weapons.

See also: radius of damage, and collateral damage distance.

Collateral damage distance . . . Minimum distance in meters that a DGZ must be separated from civilian personnel and materiel to insure that a specific incident of injuries or property damage will not be exceeded with a stated degree of assurance.

See also: collateral damage.

Collection point . . . A facility established within the corps and division for the purpose of performing limited classification, inspection, segregation, and disposition of serviceable and unserviceable materiel or for the control of civilians, prisoners, or military stragglers.



General collection point symbols.

Combat in cities . . . Combat operations conducted in a built-up or urban area where buildings and other manmade features are predominant. These operations are conducted by dismounted small units and normally involve house-to-house and street-by-street fighting.

See also: military operations in urbanized terrain.

Combat information . . . Data that can be used for fire or maneuver decisions as received without further processing, interpretation, or integration with other data.

See also: intelligence.

Combat maneuver forces . . . Those forces which use fire and movement to engage the enemy with direct fire weapon systems, as distinguished from those forces which engage the enemy with indirect fires or otherwise provide combat support and combat service support. These elements are primarily infantry, armor, cavalry (air and armored), and attack helicopter.

See also: aerial maneuver force.

Combat patrol . . . A tactical unit sent out from the main body to engage in independent fighting. It may be used to provide security or to harass, destroy, or capture enemy troops, equipment, or installations. Operations include raids, ambushes, and security missions. Combat patrols also collect information whether or not specifically related to their mission.

See also: reconnaissance patrol.

Combat power . . . The total means of destructive and/or disruptive force which a unit or force can apply against an enemy at one time.

Combat service support . . . The support provided to sustain combat forces, primarily in the fields of administration and logistics. It may include administrative services, chaplain service, civil affairs, food service, finance, legal service, maintenance, medical service, military police, supply, transportation, and other logistical services.

Combat support . . . Fire support and operational assistance provided to combat elements. May include artillery, air defense, aviation (less air cavalry and attack helicopter), engineer, military police, signal, and electronic warfare.

Combat trains . . . The portion of unit trains that provides the combat service support required for immediate response to the needs of forward tactical elements.

See also: unit trains, field trains.

Combined arms team . . . Two or more arms mutually supporting one another. A team usually consisting of tanks, infantry, cavalry, attack helicopters, field artillery, air defense artillery, and engineers.

Combined operation . . . An operation conducted by forces of two or more allied nations acting together for the accomplishment of a single mission.

See also: joint operation.

Command control . . . Functions performed through the arrangement of personnel, equipment, communications, facilities, and procedures which provide for direction of combat operations.

Command group . . . The commander and a few selected staff assistants who normally move forward of the command post, with appropriate communications means, in order to see and generally supervise combat action at a critical point.

Command post (CP) . . . The headquarters of a force from which the staff and sometimes the command group operates. The functions performed in the command post are grouped into those which relate to directing the battle and those required for sustaining the force. Usually, three CPs are established: main, rear, and tactical.

Main command post (main CP). The major headquarters of a unit which is concerned with planning, preparing, and sustaining elements of the command, control, and communications function and with collating and integrating information and intelligence. Those staff elements necessary to develop current and future plans and to acquire and coordinate combat support and combat service support for the force are represented. It is normally located in an area beyond the range of enemy medium artillery.

Rear command post. That command post concerned with sustaining a tactical force. It usually consists of personnel, logistic, and special staff sections and contains other staff elements not required at the main or tactical command posts.

Tactical command post (TAC CP). The location from which brigade and higher commanders and a small supporting staff normally direct the battle. Its size and electronic signature should be no larger than that of its next subordinate element. Ideally, it would look more like a headquarters two echelons below.

See also: command group.

Commander's estimate . . . The thinking of the commander on how best to accomplish a mission. Includes consideration of all elements and aspects of the situation that influence operations to formulate tactical courses of action and facilitate analyses of such courses of action.

See also: staff estimate

Committed force . . . A force in contact with an enemy or deployed on a specific mission or course of action which precludes its employment elsewhere.

See also: uncommitted force, reserve.

Communications checkpoint (CCP) . . . An air control point that requires serial leaders to report either to the aviation mission commander or the terminal control facility.

General CCP symbol.

See also: air control point (ACP).

Communications jamming . . . Electronic measures taken to deny the use of communications means.

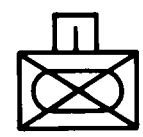
See also: jamming.

Communications security (COMSEC) . . . Protection resulting from measures taken to deny unauthorized persons information derived from the possession and study of telecommunications, or to mislead their interpretations of the results of such study. Includes cryptosecurity, physical security, and emissions security.

Communications zone . . . The rear part of the theater of operations behind the corps area which contains the lines of communications, establishments for supply and evacuation, and other agencies required for the maintenance of field forces.

Company team . . . A team formed by attachment of one or more nonorganic tank, mechanized, or infantry platoons to a tank, mechanized, or infantry company either in exchange for or in addition to organic platoons.

General symbol for company team based upon the headquarters of a mechanized rifle company.



Compartment . . . Terrain bounded on two opposite sides by features which limit observation and observed fire into the area from points outside the area.

See also: cross-compartment.

Concealment . . . The protection from observation.

See also: cover.

Concentration . . . 1. A volume of indirect fire placed on an area within a limited time. 2. An area designated and numbered for future reference as a possible target. 3. The massing of maximum fires/combat power at a certain point and time.

See also: mass, thickening, thinning.

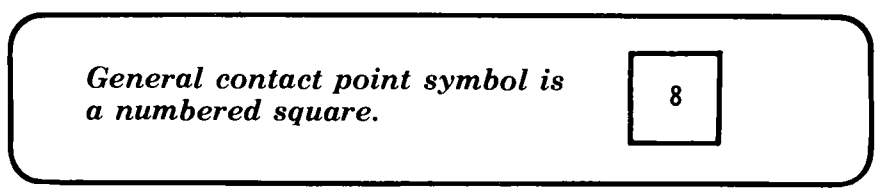
Concept of operation . . . A concise graphic, verbal, or written statement that gives an overall picture of a commander's scheme with regard to an operation or series of operations; includes the scheme of maneuver and fire support plan. It is frequently referred to as the commander's concept. It is described in sufficient detail for the staff and subordinate commanders to understand what they are to do and how to fight the battle in the absence of further instructions.

See also: implied tasks, mission, specified tasks.

Consolidation of position . . . The organizing and strengthening of a newly captured position so that it can be defended against the enemy; the occupying force also prepares for succeeding operations.

Consumption rate . . . The average quantity of an item consumed or expended during a given time expressed in prescribed units of measurement.

Contact point . . . A designated, easily identifiable point on the terrain where two or more units are required to make physical contact.



Contain . . . To restrict the enemy to or within specific limits.

See also: retain, seize.

Contingency force . . . A force designed for rapid deployment from bases normally located in the United States. It may operate independently of other Army combat forces.

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Contingency plan...A plan for major events which can reasonably be anticipated in the principal geographic subareas of a command.

Contour flight . . . See terrain flight.

Control measures . . . Directives given graphically or orally by a commander to subordinate commands in order to assign responsibilities, coordinate fires and maneuver, and to control combat operations. Each control measure can be portrayed graphically. The minimum number of control measures necessary to insure that the operation progresses according to the concept of the operation should be used. Least restrictive control measures possible are also used, thus permitting subordinate commanders maximum freedom of action in executing their assigned mission. In general, all control measures should be easily identifiable on the ground. Examples of control measures include boundaries, objectives, coordinating points, contact points, lines of departure, and assembly areas.

See also: symbols.

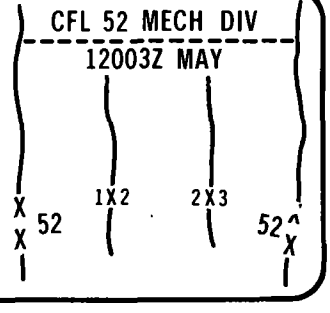
Controlled supply rate (CSR) . . . The amount of ammunition expressed in rounds per weapon per day which may be requisitioned by a unit. A controlled supply rate is established by a commander for subordinate units to control consumption and normally lists only those types of ammunition on which restrictions have been placed.

See also: required supply rate.

Convoy . . . A group of vehicles organized for the purpose of control and orderly movement with or without escort protection.

Coordinated fire line (CFL) . . . A line beyond which all surface-to-surface fire support means (mortar, field artillery, and naval gunfire) may fire at any time within the zone of the establishing headquarters without additional coordination. Its purpose is to expedite attack of targets beyond the CFL. It is usually established by brigade or division, but may be established by battalions.

A CFL (denoted by a broken black line) may or may not appear on the operation overlay, but must appear on target overlays, situation maps, and firing charts of all supporting artillery. DTG indicates time the CFL becomes effective.



See also: fire support coordination line.

Coordinating altitude . . . An altitude designated by the area airspace management authority below which Air Force activity must be coordinated with Army facilities and above which Army activity must be coordinated with Air Force facilities.

Coordinating point . . . A defensive control measure that indicates a specific location for coordination of fires and maneuver between adjacent units. They are usually indicated whenever a boundary crosses the FEBA, and may be indicated when a boundary crosses report lines or phase lines used to control security forces.

Coordinating point is depicted by a circle with an "X" inside.

Counterair. . . Operations conducted to gain and maintain air superiority, thereby preventing enemy forces from effectively interfering with friendly surface and air operations. Counterair operations are generally classified as offensive or defensive. Offensive actions range throughout enemy territory and are generally conducted at the initiative of friendly forces. Defensive actions are conducted near or over friendly territory and are generally reactive to the initiative of the enemy.

See also: tactical air operations, apportionment, and allocation.

Counterattack . . . Attack by fire or by fire and maneuver conducted in the course of defensive combat to destroy enemy units, relieve pressure on an engaged unit, or regain terrain so defenders can retain freedom of maneuver and regain the initiative.

Counterbarrier operations . . . Those actions taken to counteract an enemy obstacle or barrier system.

Counterfire . . . The attack of enemy indirect fire systems. Includes all activities necessary to destroy or neutralize enemy mortars, artillery, rocket/missile weapons, and observation posts.

Countermobility operations (Engineer) . . . The construction of obstacles and reinforcement of terrain to delay, disrupt, and destroy the enemy. The primary purpose of countermobility operations is to slow or divert the enemy and increase time for target acquisition and increase weapon effectiveness.

Counterpreparation fires . . . Intensive prearranged fires delivered when the imminence of the enemy attack is discovered. It is intended to break up enemy formations; disorganize the enemy's command, control, communication, and observation systems; decrease the effectiveness of his artillery preparation; and impair his offensive spirit.

Course of action . . . 1. Any sequence of acts which an individual or a unit may follow. 2. A possible plan open to an individual or commander that would accomplish or is related to accomplishment of the mission. 3. A feasible way to accomplish a task or mission which follows any guidance given and will not result in undue damage/risk to the command.

Cover . . . 1. Natural or artificial protection from enemy observation and fire. 2. A mission or degree of security assigned to a force operating apart from the main body to intercept, deceive, engage, delay, or disorganize the enemy, and to force the enemy to deploy and reveal the direction of his main effort before he attacks the main body or, in offensive operations, to ascertain the enemy's dispositions so that the main body may attack under the best conditions.

See also: security operations.

Covered approach . . . 1. Any route that offers protection against enemy observation or fire. 2. An approach made under the protection furnished by other forces or by natural cover.

See also: overwatch.

Covering fire . . . Fire used to suppress enemy direct fires in order to protect friendly troops.

See also: suppression.

Covering force . . . 1. A combined arms force operating apart from the main body which provides early warning, reaction time, maneuver space, and information about the enemy. The covering force is a tactically self-contained security force which operates at a considerable distance to the front, flank, or rear of a moving or stationary force. Its mission is to develop the situation early and defeat the enemy, if possible. If defeat is not possible, then the covering force deceives, delays, and disorganizes the enemy and develops the situation so that the main body can effectively react. 2. In defensive operations, a covering force operating apart from the main body has four basic tasks:

a. Force the enemy into revealing the strength, location, and general direction of his main attack.

b. Deceive the enemy or prevent him from determining the strength, dispositions, and locations of friendly forces, especially those in the main battle area.

c. Strip away the enemy air defense umbrella, or force displacement of enemy air defenses prior to attacking the main battle area.

d. Gain time for the main body to deploy, move, or prepare defenses within the main battle area.

3. In withdrawal operations, the covering force may cover the disengagement and withdrawal of the withdrawing force.

See also: active defense, security operations.

Covering force area (CFA) . . . In the defense, the operational area forward of the forward edge of the main battle area (FEBA).

See also: active defense, main battle area, rear area, covering force.

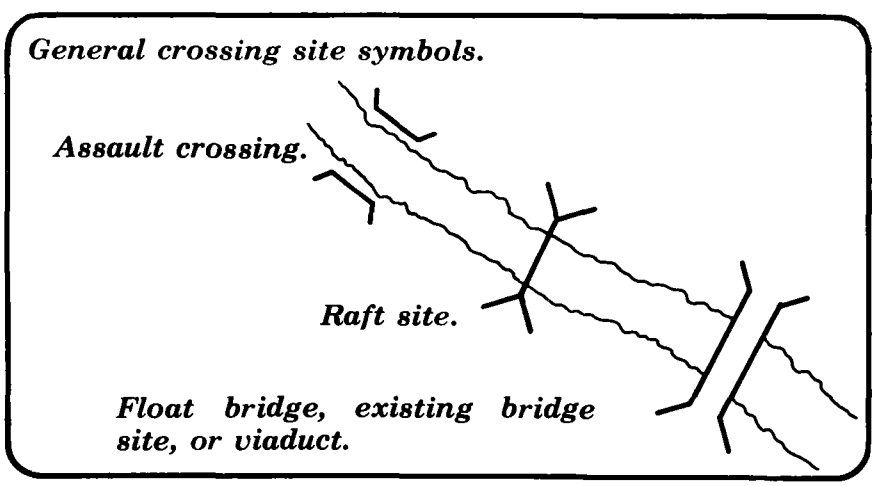
Cross attachment . . . The exchange of subordinate units between units for a temporary period. Example: A tank battalion detaches a tank company that is subsequently attached to a mechanized infantry battalion, and the mechanized infantry battalion detaches a mechanized company that is then attached to the tank battalion.

Cross-compartment . . . A terrain compartment, the long axis of which is generally perpendicular to the direction of movement of a force.

See also: compartment.

Crossing area commander . . . The officer responsible for all actions within a river crossing area from the completion of the assault phase until relieved by the appointing commander.

Crossing site . . . The location along a water obstacle where the crossing can be made using amphibious vehicles, assault boats, rafts, bridges, or fording vehicles.



Cultural obstacle . . . See obstacle.

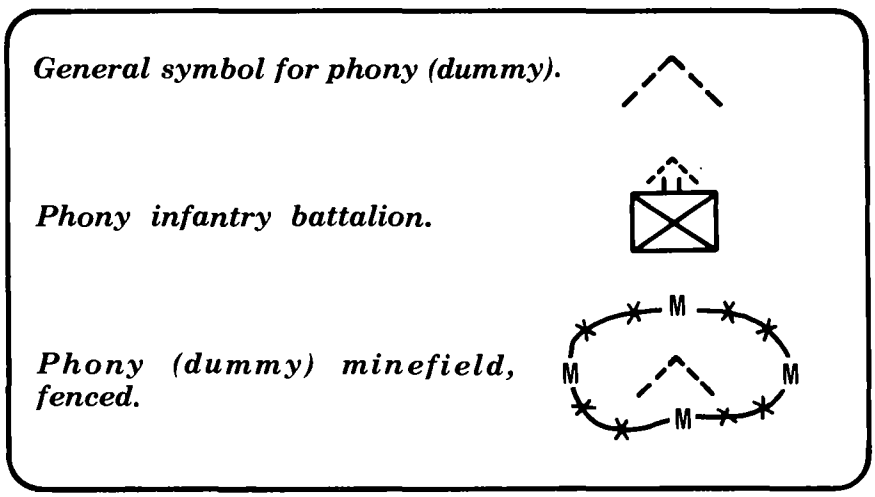
D

Damage Estimation . . . Analysis of data to estimate the damage to a target that a specific weapon will cause.

See also: target oriented analysis, radius of damage.

Dead space . . . An area within the maxium effective range of a weapon, surveillance device, or observer that cannot be covered from a given position because of intervening obstacles, the nature of the ground, the characteristics of the trajectory, or the limitations of the pointing capabilities of the weapon.

Deception . . . Those measures designed to mislead the enemy by manipulation, distortion, or falsification of evidence to induce him to react in a manner prejudicial to his interests.



See also: electronic deception, imitative electronic deception, manipulative electronic deception.

Deception operation . . . A military operation conducted to mislead the enemy. A unit conducting a deception operation may or may not make contact with the enemy. Includes demonstrations, displays, feints, and ruses.

Decisive engagement . . . An engagement in which a unit is considered fully committed and cannot or is not free to maneuver or extricate itself. In the absence of outside assistance, the action must be fought to a conclusion and either won or lost with the forces at hand.

Dedicated battery . . . An extension of the direct support artillery mission to increase responsiveness of fire support for a specific maneuver unit; normally a company or company team. Dedication is normally used only during a movement-to-contact condition when the enemy situation is vague.

Defend . . . A mission which requires a unit to destroy or contain an attacking force, or force it to withdraw. The mission may also require a unit to retain a specific line, locale, sector, or terrain feature.

See also: retain, secure.

Defend in sector . . . A mission, normally nonrestrictive in nature, that requires a defending unit to destroy, contain, or force the withdrawal of an attacker anywhere forward of the defending unit's rear boundary. The mission may become restrictive if directed to retain a specific line, locale, zone, or terrain feature.

See also: defend, retain.

Defense . . . The employment of all means and methods available to prevent, resist, or destroy an enemy attack. The purpose of defensive operations may be to cause an enemy attack to fail; preserve forces, facilities, and installations; control terrain; gain time, or to concentrate forces elsewhere.

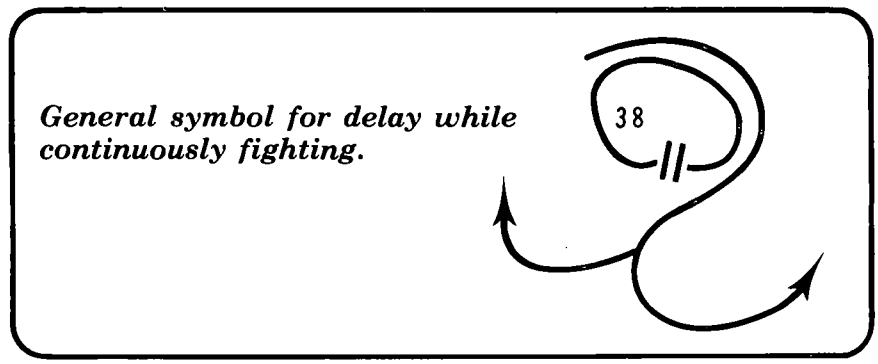
Defensive fire . . . Fire delivered by supporting units to assist and protect a unit engaged in a defensive action. May include fires delivered before the enemy forms for the attack (which may include harassing and interdiction fires), fires delivered after he forms for the attack (counterpreparation), and fires planned during the attack (protective fires).

Defilade . . . Protection from hostile observation and fire provided by a terrain feature such as a hill, ridge, or bank. To shield from enemy observation by using natural or artificial obstacles.

Defile . . . A narrow passage that tends to constrict the movement of troops.

Degree of risk . . . As specified by the commander, the risk to which friendly forces may be subjected to the effects of the detonation of a nuclear weapon used in the attack of a close-in enemy target; acceptable degrees of risk under differing tactical conditions are classified as emergency, moderate, and negligible.

Delay . . . A mission which requires a force to trade space for time without losing freedom to maneuver or risking penetration or being bypassed. The delaying force may attack, defend, ambush, raid, or use any other tactic necessary to accomplish the mission.



See also: delaying operations, retirement, retrograde operations, withdrawal, delay on alternate positions, delay on successive positions, disengagement.

Delay on alternate positions . . . The conduct of a delaying operation by deploying a force, one element behind the other, and, after holding forward as long as possible or for a specified time, passing the forward element through the rearward element to another position.

See also: delay on successive positions.

Delay on successive positions . . . The conduct of a delaying operation by fighting rearward from one position to another, holding each as long as possible or for a specified time.

See also: delay, delay on alternate positions.

Delay operation . . . An operation in which space is traded for time and maximum punishment is inflicted on the enemy without accepting decisive engagement, penetration, or being bypassed. Delaying operations are normally conducted to deny the enemy access to a specified area for a specified time.

See also: delay, retirement, retrograde operations, withdrawal.

Delay position . . . A position taken to slow the advance of the enemy without becoming decisively engaged.

Deliberate attack . . . *See attack.*

Deliberate breaching . . . The breaching of an obstacle or obstacles characterized by detailed planning and preparation. Will normally be accomplished by engineer personnel.

See also: hasty breaching.

Deliberate crossing . . . A crossing of a water obstacle that requires extensive planning and detailed preparation.

See also: hasty crossing, river crossing.

Demonstration . . . A show of force in an area where a decision is not sought, made with the intention of deceiving the enemy. It is similar to a feint with the exception that no contact with the enemy is sought.

See also: display, feint, ruse.

Denial measures . . . Actions to hinder or deny the enemy the use of space, personnel, or facilities. They may include destruction, removal, contamination, or the erection of obstructions.

Denial objects/areas . . . Areas directed by the corps commander in the obstacle and denial plan as areas, facilities, or installations that subordinate units will prevent the enemy from seizing or controlling.

Denial operation . . . An operation designed to prevent or hinder enemy occupation of, or benefit from, areas or objects having tactical or strategic value.

Denial target . . . Facilities, areas, or installations to be destroyed or denied to the enemy. Because of political implications, denial targets are only directed at the corps or theater level; however, they will be executed by the unit in whose sector the denial target is located. Examples of denial targets include power plants, railroad facilities, POL storage tanks, etc.

Desired ground zero (DGZ) . . . The point on the ground on, above, or below which it is desired that a nuclear weapon be detonated. The aiming point for the weapon.

See also: ground zero, height of burst, least separation distance, minimum safe distance, target.

Destroy . . . To render an enemy force or its equipment incapable of performing its assigned mission or function.

See also: destroy enemy in zone, neutralize.

Destroy enemy in zone . . . A requirement to eliminate organized resistance from an assigned zone by isolating enemy forces, preventing their escape, and subsequently killing or capturing most of the personnel. It also includes destroying, damaging, or capturing enough equipment to make the enemy force ineffective as a tactical unit. If the commander's desire is the destruction of enemy forces, the statement "destroy enemy in zone" is included as a specified task in the mission statement.

See also: clear enemy in zone, zone of attack.

Destruction fire . . . Fire delivered for the sole purpose of destroying materiel objects (usually point targets).

See also: neutralization fire, suppression.

Detached unit . . . A unit that is serving away from the organization to which it is organic and to which it remains assigned. A detached unit may function as an independent organization, or it may be attached to or serve with or under another organization.

See also: assign, attach, operational control.

Direct air support center (DASC) . . . The operational component of the tactical air control system designated to coordinate and direct tactical air support operations. It is under the operational control of the tactical air control center. Its primary function is to provide fast reaction to satisfy immediate requests from surface forces for close air support, tactical air reconnaissance, and tactical airlift. The DASC also provides advice and assistance to the Army unit with which it operates concerning the employment of all Air Force resources.

See also: tactical air coordination element (TACE).

Direct fire . . . Fire directed at a target which is visible to the aimer.

Direct pressure force . . . A force employed in a pursuit that orients on the enemy main body to prevent enemy disengagement or defensive reconstitution prior to envelopment by the encircling force. It normally conducts a series of hasty attacks to slow the enemy's retirement by forcing him to stand and fight.

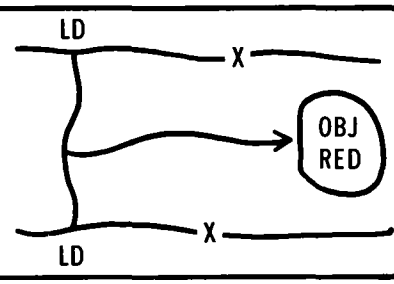
See also: encircling force, pursuit.

Direct support . . . The support provided by a unit or force not attached or under command of the supported unit or force, but required to give priority to the support required by that unit or force.

See also: general support, general support-reinforcing, reinforcing.

Direction of attack . . . A specific direction or route that the main attack or the main body of the force will follow. If used, it is normally at battalion and lower levels. Direction of attack is a more restrictive control measure than axis of advance, and units are not free to maneuver off the assigned route. It is usually associated with infantry units conducting night attacks, units involved in limited visibility operations, or in counterattacks.

Direction of attack is shown graphically as an arrow extending from the line of departure. The arrow is not normally labeled.



See also: axis of advance, zone of attack.

Disengagement . . . Breaking contact with the enemy and moving to a point where the enemy can neither observe nor engage the unit by direct fire.

See also: delay, withdrawal.

Dispersion . . . 1. The spreading or separating of a force and its installations to reduce vulnerability to enemy action. 2. A scattered pattern of hits by bombs or projectiles fired from the same weapon or group of weapons with the same firing data. 3. In chemical or biological operations, the dissemination of agents in liquid or aerosol form.

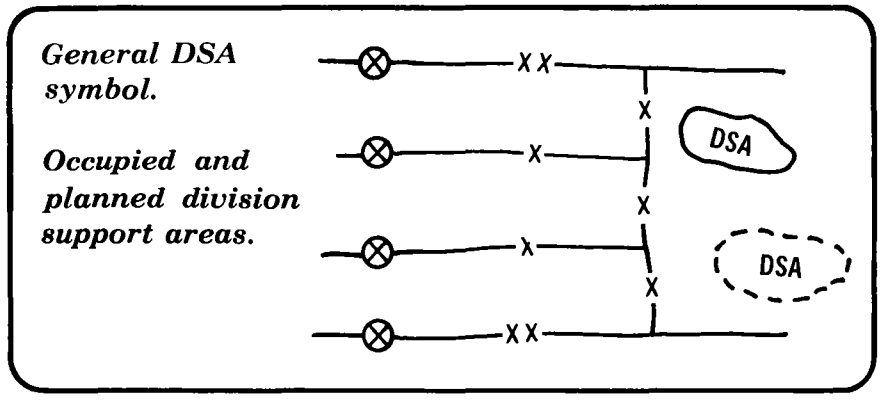
Displace . . . To leave one position and take another. Forces may be laterally displaced to concentrate combat power in threatened areas.

Display . . . A deception technique to mislead the enemy's visual senses, including his observation by radar, camera, infrared device, or the human eye. Includes simulations, disguises, portrayals, or some combination.

See also: demonstration, feint, ruse.

Disposition . . . Distribution of the elements of a command within an area, usually the exact location of each unit headquarters and the deployment of the forces subordinate to it.

Division support area (DSA) . . . A control measure used to designate the area in which elements of the division headquarters company that are not required in the main CP are collocated with the DISCOM headquarters and other division combat service support elements.



See also: brigade support area.

Doctrinal templating . . . An analytical intelligence technique used to assist a commander in predicting an enemy course of action based upon a comparison of enemy force composition, frontage, depth, echelon spacing, and disposition of supporting units with known enemy tactical doctrine.

See also: event templating.

Dominant terrain . . . Terrain which, because of its elevation, proportions, or location, commands a view of and may offer fields of fire over surrounding terrain.

Double envelopment . . . A form of enveloping maneuver executed by forces which move around both flanks of an enemy position to attack the flanks or objectives in the rear of the enemy. The enemy is normally fixed in position by a supporting frontal attack or by indirect and/or aerial fires.

See also: envelopment, single envelopment, turning movement.

Drop . . . 1. Parachute jump, individual or en masse, or supply delivery by parachute from an aircraft in flight, or the act of making such a jump or delivery. 2. A correction used by an artillery observer or a spotter to indicate that a decrease in range along a spotting line is desired.

Drop zone (DZ) . . . A specified area upon which airborne troops, equipment, and supplies are dropped by parachute or on which supplies and equipment may be delivered by free fall.

E

Echelon . . . 1. A subdivision of a headquarters (i.e., forward echelon, rear echelon). 2. Separate level of command. Compared to a brigade, a division is a higher echelon; a battalion is a lower echelon. 3. A fraction of a command in the direction of depth, to which a principal combat mission is assigned (i.e., attack echelon, support echelon, reserve echelon). 4. A formation in which the subdivisions are placed one behind another.

Echelon displacement . . . Movement of a unit from one position to another without discontinuing performance of its primary function. Normally, the unit divides into two (base and advance) functional elements; and while the base continues to operate, the advance element displaces to a new site where, after it becomes operational, it is joined by the base element.

Echelonment . . . Arrangement of personnel and equipment into assault, combat followup, and rear components or groups.

Economy of force . . . Use of minimum force necessary to accomplish a mission. Forces are normally economized to permit concentration of forces elsewhere.

Effective range . . . That range at which an average soldier has a 50 percent probability of hitting a target with a small arms weapon.

See also: maximum effective range.

Electromagnetic pulse (EMP) . . . An "electronic wave" generated by a nuclear detonation which induces a current in any electrical conductor. It can temporarily disrupt or overload and damage components of electronic equipment if improperly protected.

See also: governing effect.

Electronic counter-countermeasures (ECCM) . . . Actions taken to insure friendly use of the electromagnetic spectrum against electronic warfare. Includes antijamming, authentication, radio discipline, and MIJI reporting.

See also: electronic countermeasures, electronic warfare, electronic warfare support measures, meaconing, intrusion, jamming, interference (MIJI) report.

Electronic countermeasures (ECM) . . . Actions taken to prevent or reduce the enemy's effective use of the electromagnetic spectrum. Includes jamming and electronic deception.

See also: electronic counter-countermeasures, electronic warfare, electronic warfare support measures.

Electronic deception . . . The simulation and/or manipulation of friendly electromagnetic radiations and the imitation of enemy electromagnetic radiations for the purpose of deceiving the enemy.

See also: imitative electronic deception, manipulative electronic deception.

Electronic order of battle . . . Intelligence pertaining to the deployment of enemy electronic emitters in a given area.

Electronic warfare (EW) . . . The use of electromagnetic energy to determine, exploit, reduce, or prevent hostile use of the electromagnetic spectrum and to insure friendly use thereof.

General electronic warfare symbol.

See also: electronic countermeasures, electronic counter-countermeasures, electronic warfare support measures.

Electronic warfare support measures (ESM) . . . Actions taken to search for, intercept, locate, and identify enemy electromagnetic energy sources for the purpose of employing tactical friendly forces or exploitation for intelligence purposes. Includes interception, identification, analysis, and locating.

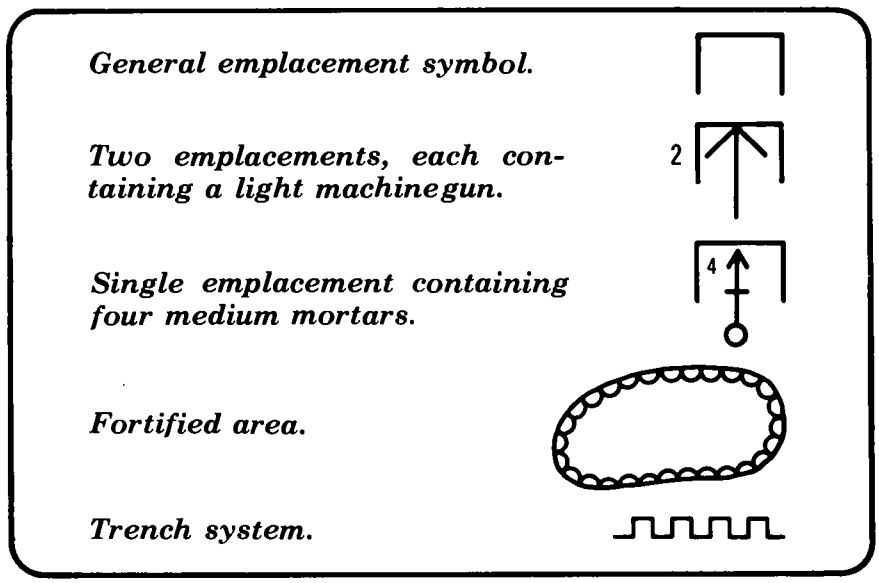
See also: electronic countermeasures, electronic counter-countermeasures, electronic warfare.

Embarkation . . . The loading of troops with their supplies and equipment into ships and/or aircraft.

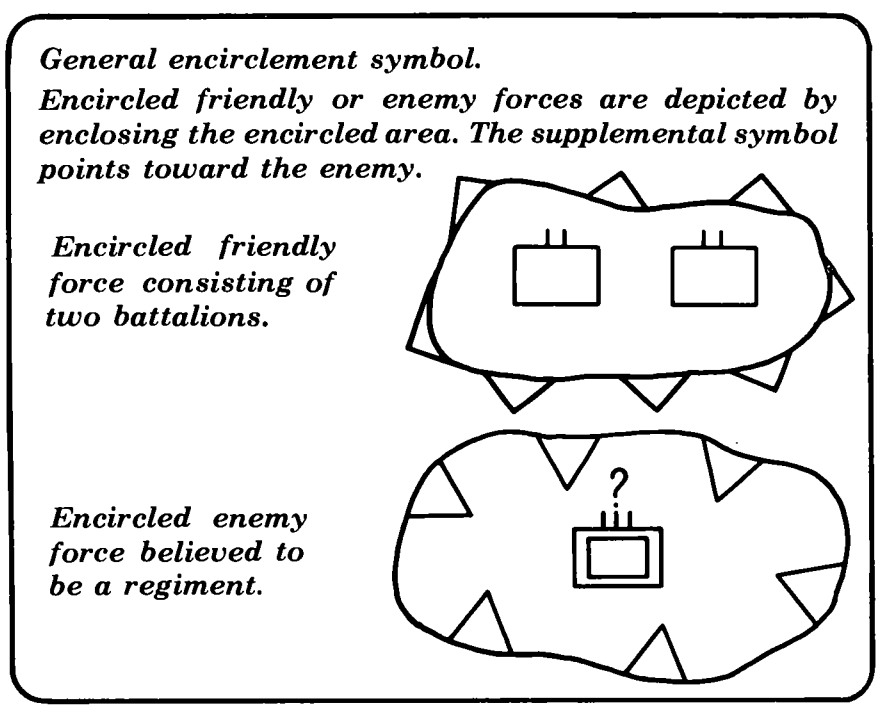
Emergency risk (nuclear) . . . The measure of troop safety involving the highest degree of risk to friendly troops used in computing the minimum safe distance from a nuclear detonation. Five percent of the personnel exposed to emergency risk will become combat ineffective; a larger number will suffer nuisance effects. Emergency risk is accepted only when absolutely necessary. It is expressed in terms of risk to unwarned, exposed personnel; to warned, exposed personnel; and to warned, protected personnel.

See also: moderate risk, negligible risk, troop safety.

Emplacement . . . 1. A prepared position for one or more weapons or pieces of equipment for protection against hostile fire or bombardment and from which they can execute their tasks. 2. The act of fixing a gun in a prepared position from which it may be fired.



Encirclement . . . The loss of maneuver freedom resulting from enemy control of all ground routes of evacuation and reinforcement.



Encircling force . . . A force employed in a pursuit to envelop an enemy force which has lost the capability to defend or delay in an organized fashion. It seeks to cut off escape routes and, in conjunction with direct pressure forces, attack and destroy the enemy force.

See also: direct pressure force, pursuit.

Engineer work coordination . . . The coordination of engineer effort within an area of operations facilitated by use of area and task assignments.

See also: obstacle plan, engineer work line, terrain reinforcement, general engineering.

Engineer work line . . . A line used to compartmentalize an operational area to indicate where specific engineer units have primary responsibility for the engineer effort. It is normally used at division level to discriminate between the sector supported by division engineer assets and the sector supported by reinforcing (GS) corps engineer units.

See also: engineer work coordination, forward working limit.

Envelopment . . . An offensive form of maneuver in which the main effort is directed against the flank or rear of an enemy force. The attack is directed toward an objective behind enemy frontlines. It usually involves a supporting attack directed against the enemy's front. Vertical envelopments may be conducted by airborne and airmobile assaults.

See also: double envelopment, single envelopment, turning movement.

Essential elements of information (EEI) . . . The critical items of information regarding the enemy and his environment needed by the commander (by a particular time) to compare with other available information and intelligence in order to assist him in reaching a logical decision.

Estimate of the situation . . . See commander's estimate.

Event templating . . . An analytical intelligence technique used to help a commander predict enemy intentions by comparing enemy activities to time and space.

See also: doctrinal templating.

Exfiltration . . . The removal of personnel or units from areas under enemy control by stealth, deception, surprise, or clandestine means.

Existing obstacles . . . See obstacle.

Exploitation . . . An offensive operation which follows a successful attack to take advantage of weakened or collapsed enemy defenses. Its purpose is to prevent reconstitution of enemy defenses, to prevent enemy withdrawal, to secure deep objectives, and to destroy enemy forces.

See also: pursuit.

F

Fallout . . . Radioactive particles produced by a nuclear detonation which fall from the nuclear cloud in a pattern determined primarily by wind factors.

General fallout symbol.

If the mushroom is known to be "fallout producing," the stem of the mushroom will be shaded.

The effective downwind direction (if known) will be denoted by an arrow pointing in the appropriate direction from ground zero.

Symbols for friendly detonations are colored blue; enemy detonations are colored red.

See also: governing effect, radiation dose, radiation dose rate, radiation status.

Feint . . . An offensive operation intended to draw the enemy's attention away from the area of the main attack, inducing the enemy to move his reserves or shift his fire support in reaction to the feint. Feints must necessarily appear real; therefore, some contact with the enemy is required. Usually a limited-objective attack ranging in size from a raid to a supporting attack is conducted.

Axis of advance for feint.

Direction of attack for feint.

See also: demonstration, display, ruse.

Field of fire . . . The area that a weapon or group of weapons may effectively cover with fire from a given position.

Field trains . . . The portion of the unit trains that provides the combat service support not required for immediate response to the needs of tactical elements. They are located rearward to prevent interference with the tactical operation. Field trains, displaced independently from the supported tactical unit, achieve security through passive measures.

See also: unit trains, combat trains.

Fighter liaison officer . . . A member of the tactical air control party (TACP) who meets all prerequisites of a forward air controller and is qualified to control air strikes. He advises the air liaison officer (ALO) and ground commander's staff on the capabilities, limitations, and employment of close air support resources. He also assists and advises in the development of close air support requests and coordinates close air support missions with the FSE/FSCC.

Fighting through . . . A dismounted infantry technique of attacking and overrunning an enemy position without going into a standup assault. The attacking unit takes advantage of cover, concealment, and short rushes, thus reducing its vulnerability while suppressive fires continue from overwatching positions. The attacking force seeks to penetrate enemy defenses in a narrow sector and then overcome remaining defenses from the flank or rear.

Final coordination line . . . A line close to the enemy position used to coordinate the lifting and shifting of supporting fires with the final deployment of maneuver elements. It should be recognizable on the ground.

Final protective fire (FPF) . . . An immediately available preplanned barrier of direct and indirect fire designed to provide close protection to defensive positions and installations by impeding enemy movement into defensive areas. Indirect fires are normally allocated from the brigade to maneuver battalions and further allocated to company level. The authority to call the fires is vested in the maneuver commander in whose sector they are located.

Final protective line (FPL) . . . A line selected where an enemy assault is to be checked by interlocking fire from all available weapons.

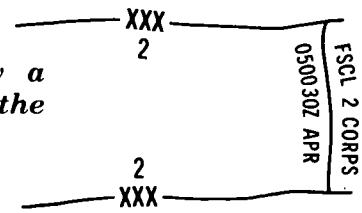
Fire and maneuver . . . A tactical technique, usually an extension of bounding overwatch, used once contact with the enemy is gained. One element moves while another provides a base of fire.

See also: movement technique, covering fire, suppression, base of fire.

Fire support . . . The collective employment of mortars, field artillery, close air support, and naval gunfire in support of a battle plan.

Fire support coordination line (FSCL) . . . A line, normally placed on terrain identifiable from the air, beyond which all targets may be attacked by any weapon system (including aircraft and special weapons) without endangering friendly troops or requiring additional coordination with the establishing headquarters so long as the effects of the weapon do not fall short of this line. Its purpose is to expedite the attack of targets beyond the line. It is normally established by corps or independent division.

An FSCL is designated by a black line extending across the affected sector.



See also: coordinated fire line.

Fire support coordinator (FSCOORD) . . . The senior field artillery officer at each echelon above platoon level who serves as the principal advisor to the commander for the coordination of all fire support within the unit's area of responsibility.

Fire support element (FSE) . . . That portion of the force tactical operations center at every echelon above company/troop which is responsible for targeting, coordination, and integration of fires delivered on surface targets by fire support means under the control of or in support of the force.

Fire support plan . . . A plan containing the information necessary for understanding how fire support will be used to support an operation. The fire support plan should include a portion for each fire support element involved in the operation.

Fire support team (FIST) . . . A team provided by field artillery to each maneuver company/troop. The FIST chief, a field artillery lieutenant, acts as the company/troop commander's FSCOORD and is responsible for planning and coordinating all indirect fire means available to the unit. This includes mortars, field artillery, close air support, and naval gunfire.

Fix . . . To prevent the enemy from withdrawing any part of his force from one area for use elsewhere.

Flank guard . . . A security element operating to the flank of a moving or stationary force to protect it.

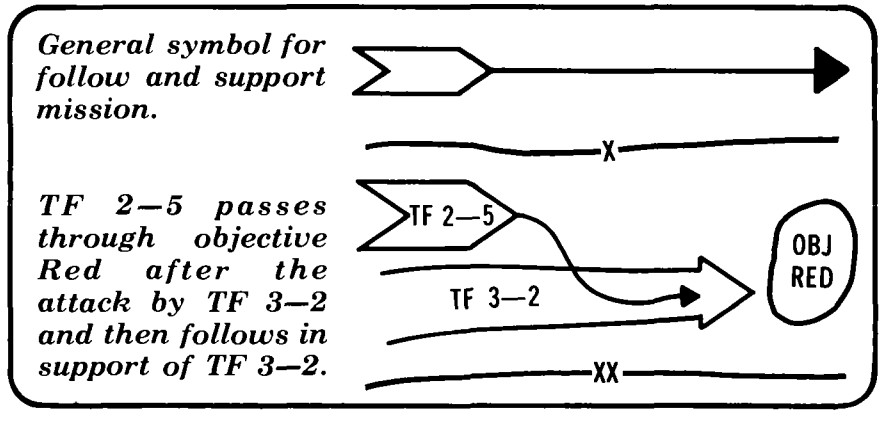
See also: security operations.

Flanking obstacle . . . Obstacles located to protect the flanks of a unit and to prevent or slow enemy penetrations and envelopments.

Flashblindness (dazzle) . . . A temporary loss of vision caused by exposure to intense light. Flashblindness from a nuclear burst during daylight hours persists for about 2 minutes for personnel facing directly toward the burst or a reflective surface. At night, flashblindness affects almost all personnel in the target area. A similar effect may be induced in image intensification devices by intense illumination.

See also: thermal radiation.

Follow and support . . . The mission of a force that may be committed behind an exploiting force to secure lines of communication or relieve elements of the exploiting force left behind to contain bypassed enemy forces and subsequently to eliminate bypassed forces. The follow and support force may be required to provide limited combat service support to the exploiting force, to reinforce the leading force, or to assume the primary mission of the leading force. It is a fully committed unit and not the commander's reserve. The follow and support force normally remains under the control of the common commander.

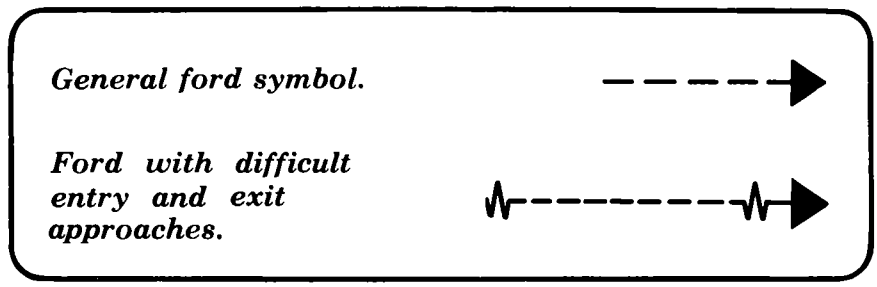


Followup echelon . . . Forces moved into the objective area after the assault echelon of an airborne, airmobile, or amphibious operation to sustain the defense and to conduct offensive operations as part of the larger force after linkup. Normally, it includes followup elements of the assault units, maintenance unit headquarters, and elements of the supply and service battalion.

See also: assault echelon, rear echelon.

Followup supply . . . That initial resupply which is delivered by air directly to forces in the airhead. It is prepackaged on a unit basis for automatic or on-call delivery.

Ford . . . A shallow part of a body of water that can be crossed without bridging, boats, or rafts. A location in a water barrier where the physical characteristics of current, bottom, and approaches permit the passage of personnel and/or vehicles and other equipment that remain in contact with the bottom.



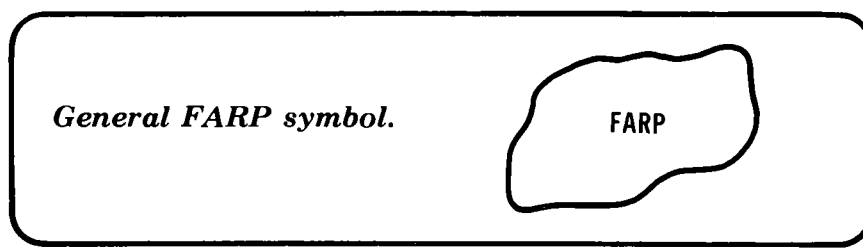
Forms of maneuver . . . The general orientation or direction of a force approaching an enemy. The two basic forms of maneuver are the penetration and the envelopment.

See also: penetration, envelopment.

Forward air controller (FAC) . . . A member of the tactical air control party (TACP) who, from a ground or airborne position, controls aircraft engaged in close air support of ground forces.

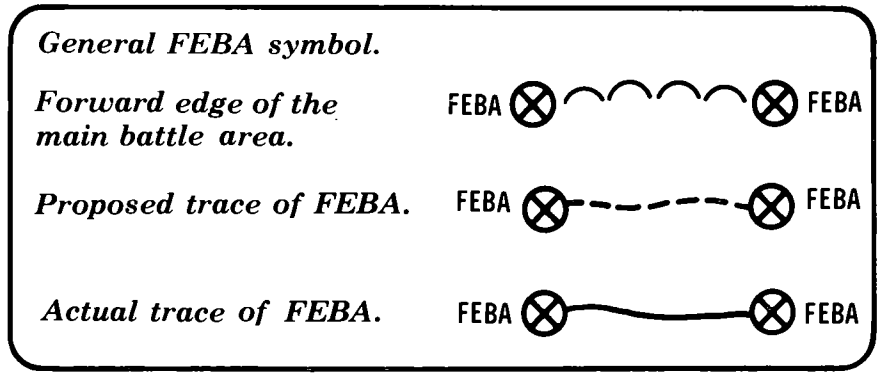
See also: air liaison officer (ALO).

Forward arming and refueling point (FARP) . . . A temporary facility organized, equipped, and deployed by an aviation unit commander and located closer to the area of operation than the aviation unit's combat service area to provide fuel and ammunition necessary for the employment of helicopter units in combat.

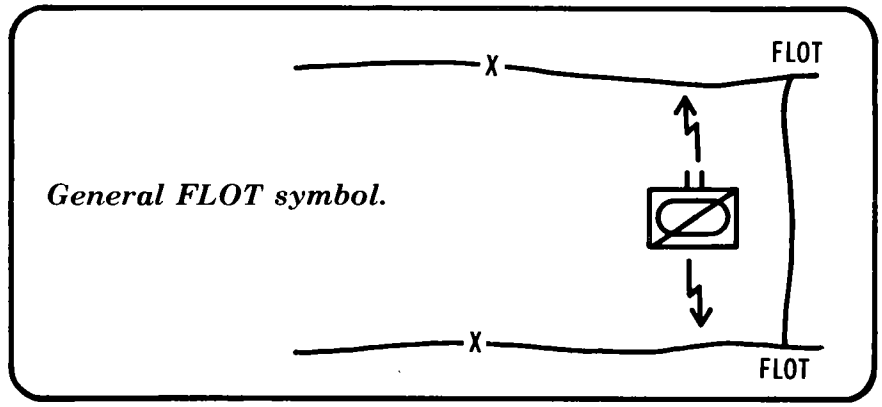


Forward area support team (FAST) . . . A combat service support team of the division support command (DISCOM) tailored to support a specific divisional combat brigade for a particular operation or period of time. The elements of this team operate in a brigade support area, and their activities are coordinated by a forward area support coordinator (FASCO) or placed under his operational control.

Forward edge of the battle area (FEBA) . . . The forward limit of the main battle area (MBA).



Forward line of own troops (FLOT) . . . A line which indicates the most forward positions of friendly forces in any kind of military operation at a specific time.



Forward observer (FO) . . . An observer, normally assigned to a fire support team, operating with forward units and trained to adjust ground and naval gunfire and pass back battlefield information. In the absence of a forward air controller, he may control close air support strikes.

See also: fire support team (FIST).

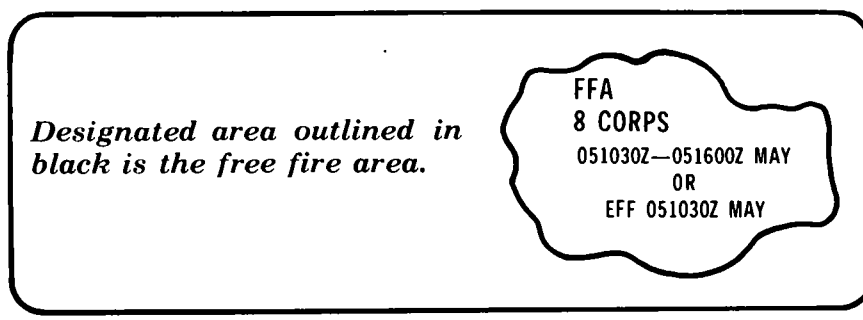
Forward obstacles . . . Obstacles located generally along the initial and successive defense areas of the forward units. They consist of natural and cultural obstacles employed in depth for close-in protection.

See also: obstacle.

Forward working limit . . . An engineer work line established by agreement between the corps and division engineers to the rear of which all engineer effort is the responsibility of the corps engineer.

Fragmentary order (FRAGO) . . . An abbreviated operation order used to make changes in missions to units and to inform them of changes in the tactical situation.

Free fire area (FFA) . . . A specific designated area into which any weapon system may fire without additional coordination from the establishing headquarters. The purpose is to expedite fires. It is usually established by the division or higher level commander.



Front . . . 1. The lateral space occupied by an element, measured from the extremity of one flank to the extremity of the other flank. The unit may be extended in a combat formation or occupying a position, depending on the type operation involved. (This and the term "frontage" are sometimes used incorrectly to describe the width of a zone of action or area of responsibility.) 2. The line of contact of two opposing forces. 3. The direction toward which the command is faced. 4. A Threat formation equivalent to an Army group comprised of two or more armies with appropriate supporting forces.

See also: frontage.

Frontage . . . The width of the front plus that distance beyond the flanks covered by observation and fire by a unit in combat.

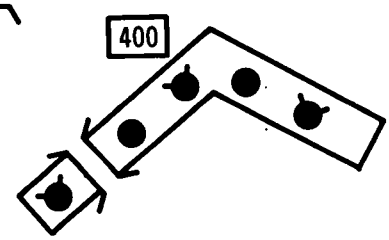
See also: front.

G

Gap . . . 1. Any break or breach in the continuity of tactical dispositions or formations beyond effective small arms coverage. 2. A portion of a minefield or other obstacle in which no obstructions have been constructed. It is wide enough to enable a friendly force to pass through in tactical formation; it is in excess of 16 meters and seldom less than 100 meters wide.

General gap symbol.

Gap indicated in a minefield containing 400 antipersonnel and antitank mines.



See also: lane.

General engineering . . . Those engineer missions which do not directly contribute to the mobility, countermobility, or survivability of committed maneuver units but which are essential for their firepower and logistic support.

See also: engineer work coordination.

General support . . . 1. Support that is given to the supported force as a whole and not to any particular subdivision thereof. 2. A mission which is frequently assigned to combat support and combat service support units. For example, a division field artillery battalion assigned to a general mission operates under control of the division artillery headquarters while supporting the whole division.

General support-reinforcing (GSR) . . . Artillery mission requiring the unit assigned the mission to support the force as a whole and provide reinforcing fires for another artillery unit as a second priority.

See also: direct support (DS), general support (GS), reinforcing (R).

Governing effect . . . That nuclear effect which extends the farthest from ground zero.

See also: electromagnetic pulse, fallout, induced radiation, initial radiation, preinitiation, residual radiation, thermal radiation, troop safety.

Grazing fire . . . Fire which is approximately parallel to the ground so that the center of the cone of fire does not rise above the height of a man standing.

Ground tactical plan . . . An airborne or airmobile operational plan covering the conduct of operations in the objective area.

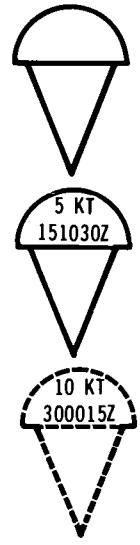
See also: air movement plan, landing plan, marshaling plan.

Ground zero . . . The point on the ground on, above, or below which is the center of burst of a nuclear weapon.

General ground zero symbol.

The nuclear explosion is represented by a mushroom, the foot of the stem indicating the position of ground zero.

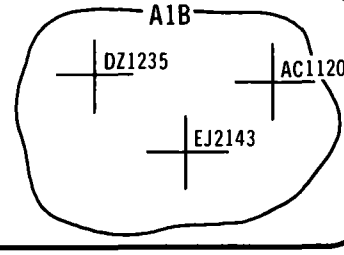
Inside the segment representing the mushroom head are shown the power (KT or MT) and the date-time group of the explosion. When not accurately known (e.g., for enemy bursts), the yield is shown between brackets. Proposed explosions are shown by dotted lines.



See also: desired ground zero.

Group of targets . . . Two or more targets on which simultaneous fire may be desired. They are designated by the letters assigned to the maneuver brigade or the division artillery TOC with a number inserted between the letters.

General group of targets symbol is designated by an enclosed area with a group identification designation assigned.



Guard operations . . . See security operations.

Gun-target line . . . An imaginary straight line from the gun to the target.

H

Habitual association . . . The close and continuous relationship established between support elements and the combat units they support or between combat units which are frequently cross-attached to insure a mutual understanding of operating procedures and techniques and to increase overall responsiveness.

Handoff . . . 1. The passing of responsibility for the battle from one commander to another. For example, the passage of responsibility for the battle from the covering force commander to the MBA commander during an active defense. The time and distance required for passage are dependent on terrain, ability of field artillery positioned in the MBA to support, and the capability of MBA forces and commanders to assume control. 2. The handoff of the battle that occurs between units at all echelons of command during passage of lines and relief operations. 3. The handoff of targets between individual weapon systems. For example, between two tanks when one is repositioning or between scout helicopters and attack helicopters, and fighter aircraft during the engagement of enemy armor.

Hasty attack . . . See attack.

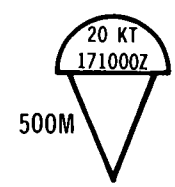
Hasty crossing . . . The crossing of a water obstacle using crossing means at hand or readily available without pausing to make elaborate preparations.

See also: deliberate crossing.

Height of burst (HOB) . . . That vertical distance above the ground at which a nuclear detonation occurs.

General HOB symbol.

The height of the explosion is shown in meters alongside the stem. If not accurately known, the approximate height should be shown (i.e., HIGH, LOW, SURFACE, SUBSURFACE).



See also: ground zero, probable error in height, desired ground zero.

H-hour . . . The specific hour on D-day at which a particular operation commences. The hour may be the commencement of hostilities or the hour at which an operation plan is executed or to be executed. When several operations are to be conducted in the same area at approximately the same time, any letter of the alphabet may be used except A, C, D, E, J, or M. Time is shown by adding and subtracting hours (i.e., H+7, B-3).

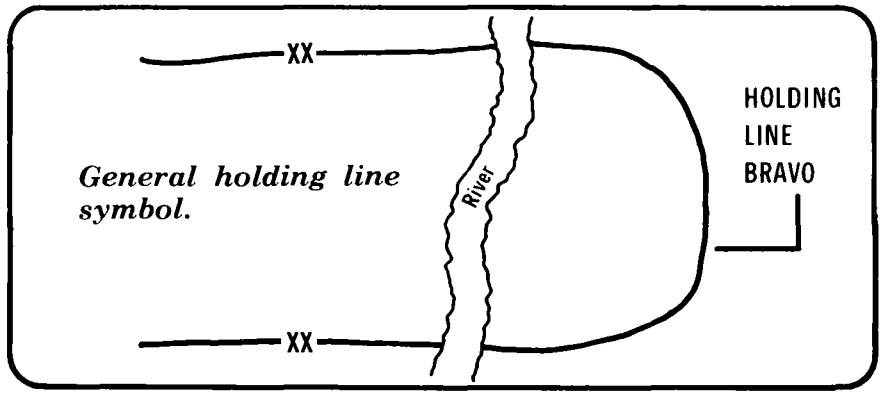
Hide . . . The positioning of a vehicle, individual, or unit in such a manner that no part is exposed to observation or direct fire.

See also: turret-down, hull-down, defilade.

High-angle fire . . . Fire delivered at elevations greater than the elevation of maximum range; fire, the range of which decreases as the angle of elevation is increased.

Holding area . . . Nearest covered and concealed position to the pickup zone (PZ) or crossing site where troops are held until the time for them to move forward.

Holding line . . . In retrograde river crossing operations, the outer limit of the area established between the enemy and the water obstacle to preclude direct and observed indirect fires into crossing areas.



See also: bridgehead line.

Hostile criteria . . . Description of conditions under which an aircraft or vehicle may be identified as hostile for engagement purposes.

See also: rules of engagement.

Hull-down . . . The positioning of an armored vehicle in such a manner that the muzzle of the gun/launcher is the lowest part of the vehicle exposed to the front.

See also: turret-down, hide.

I

Identification, friend or foe (IFF) . . . A method of determining the friendly or unfriendly character of aircraft, vehicles, or ships by other aircraft, vehicle, weapons, and ships by using electronic detection and associated identification equipment.

Identification smoke . . . Smoke employed to identify targets, supply and evacuation points, friendly unit perimeters, and for prearranged battlefield communications.

See also: obscuration smoke, screening smoke, smoke.

Imagery intelligence . . . Intelligence derived from imagery produced by radars, infrared, and photographic sensors carried by overhead platforms.

Imitative electronic deception . . . Imitating enemy electromagnetic radiations (predominately communications) after intruding his electromagnetic channels in order to deceive him or to disrupt his operations.

See also: electronic deception, manipulative electronic deception.

Immediate mission request . . . A request for an airstrike or reconnaissance mission that by its nature could not be identified sufficiently in advance to permit detailed mission consideration and planning.

Immediate permanent incapacitation dose (IP) . . . That radiation absorbed dose, determined to be 8,000 rads, which causes personnel to become incapacitated within five minutes of exposure and, for physically demanding tasks, to remain incapacitated until death which occurs within one to two days.

Immediate transient incapacitation dose (IT) . . . That radiation absorbed dose, determined to be 3,000 rads, which causes personnel to become incapacitated within five minutes of exposure and remain so for 30 to 45 minutes. Exposed personnel will then partially recover but will be functionally impaired until death which occurs in four to six days.

Implied tasks . . . Those additional tasks not specifically stated in an operations plan or order that the commander identifies as necessary to insure accomplishment of his overall mission. When identifying implied tasks, the commander should exercise caution not to include tasks that are routine or inherent in his mission.

See also: specified tasks, concept of operations, mission.

Indirect fire . . . Fire delivered at a target which cannot be seen by the gunner.

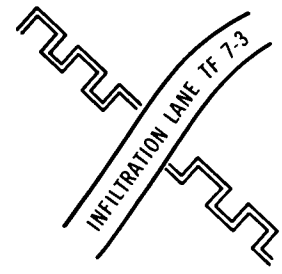
Induced radiation . . . Radiation resulting from neutron capture by certain soil elements; these elements become radioactive and emit beta particles and gamma radiation for extended periods following the explosion.

See also: governing effect.

Infiltration . . . 1. The movement through or into an area or territory occupied by either friendly or enemy troops or organizations. The movement is made either by small groups or by individuals, at extended or irregular intervals. When used in connection with the enemy, it implies that contact is avoided. 2. When used in conjunction with a tactical vehicular march, vehicles are dispatched individually or in small groups at irregular intervals to reduce traffic density and prevent undue massing of vehicles.

General infiltration symbol.

Movement may be directed on an infiltration land depicted graphically by two solid lines with the words INFILTRATION LANE and the unit designation.



Initial nuclear radiation . . . All radiation that occurs within the first minute after a nuclear detonation.

See also: governing effect.

Insertion . . . 1. Placement of troops and equipment into an operational area in airmobile operations. 2. The placement of observation posts, patrols, or raiding parties either by helicopter or parachute.

Intelligence . . . The product resulting from the collection, evaluation, analysis, integration, and interpretation of all available information concerning an enemy force, foreign nations, or areas of operations and which is immediately or potentially significant to military planning and operations.

See also: combat information.

Interdict . . . To isolate or seal off an area by any means; to deny use of a route or approach.

Interdiction fire . . . Fire delivered on selected terrain to deny the enemy unrestricted use of that area.

Intermediate obstacles . . . Obstacles located between the forward and rear area obstacles. They are designed to assist in limiting enemy penetrations of the defense area, to canalize enemy forces into selected target areas, and to impede the lateral movement of enemy forces in the defense area.

Interoperability . . . The ability of systems, units, or forces to provide services to and accept services from other systems, units, or forces and to use the services so exchanged to enable them to operate effectively together.

Intervisibility . . . The condition of being able to see one point from another. This condition may be altered or interrupted by weather, obscuration, or terrain masking.

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J

Jamming . . . The deliberate radiation, reradiation, or reflection of electromagnetic energy to prevent or degrade the receipt of information by a receiver. It includes communications jamming and noncommunications jamming.

Joint operation . . . An operation carried on by two or more of the Armed Forces of the United States.

See also: combined operation.

Joint task force (JTF) . . . A force composed of elements of the Army, the Navy, the Marine Corps, and the Air Force, or two or more of these services, which is constituted and so designated by the Secretary of Defense or by the commander of a unified command, a specified command, or an existing joint task force.

K

Key terrain . . . Any locality or area the seizure or retention of which affords a marked advantage to either combatant.

L

Landing plan . . . An airborne or airmobile plan prescribing the sequence, place of arrival, and method of entry into the objective area. The purpose of the plan is to get the correct units to the correct place in the correct order to properly execute the ground tactical plan.

See also: air movement plan, ground tactical plan, marshaling plan.

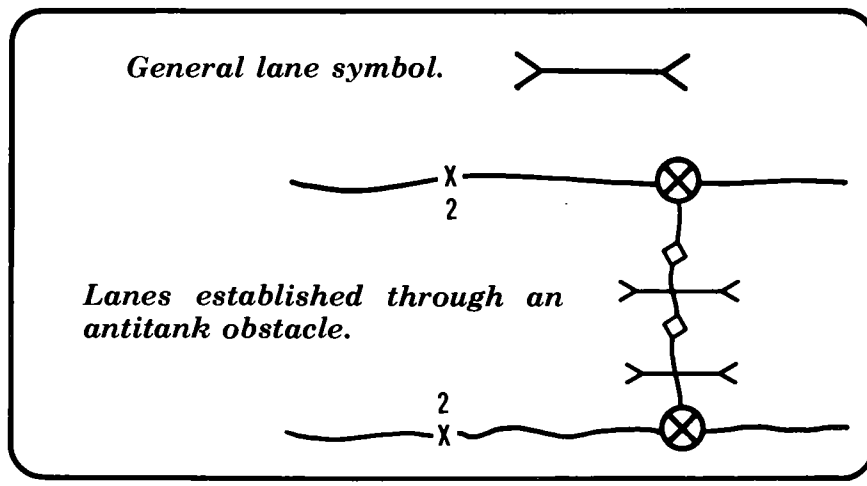
Landing zone (LZ) . . . A specified zone within an objective area used for the landing of aircraft.

General landing zone symbol.

Landing zone control party . . . A group of personnel specially trained and equipped to establish and operate communication and signal devices from the ground for traffic control of aircraft/helicopters for a specific landing zone.

See also: pathfinders.

Lane . . . A clear route through an obstacle. A lane for foot troops is a minimum of two meters in width and is normally at least eight meters. A single lane for vehicles is a minimum of eight meters in width; a double lane is at least sixteen meters in width.



See also: gap, infiltration, passage lane.

Latent lethality dose (LL) . . . That radiation absorbed dose, determined to be 650 rads, which causes personnel to become functionally impaired within two hours of exposure. Personnel may respond to medical treatment and survive; however, the majority of exposed personnel will remain functionally impaired until death which occurs in several weeks.

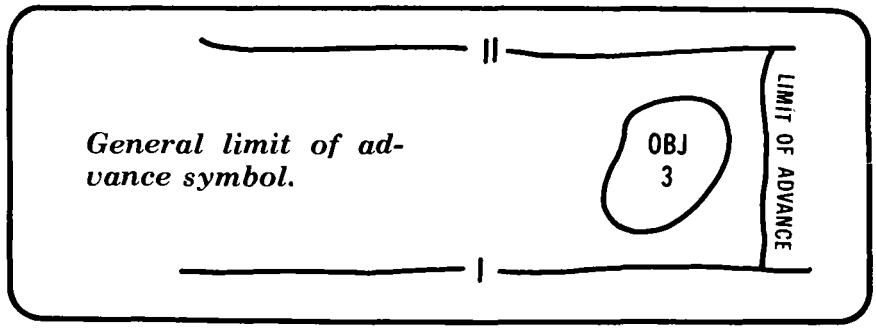
Leading edge of built-up area . . . That line beyond which an observer moves from an environment characteristic of open areas to an environment characteristic of one of the types of built-up areas.

Least separation distance (LSD) . . . Minimum distance in meters that a designated ground zero must be separated from an object to preclude damage or preclude obstacles with 90 percent assurance.

See also: target oriented analysis, preclusion oriented analysis, preclusion of obstacles, preclusion of damage, troop safety, minimum safe distance, desired ground zero (DGZ).

Liaison . . . That personal contact or communication maintained between elements of military forces to insure mutual understanding and unity of purpose and effort.

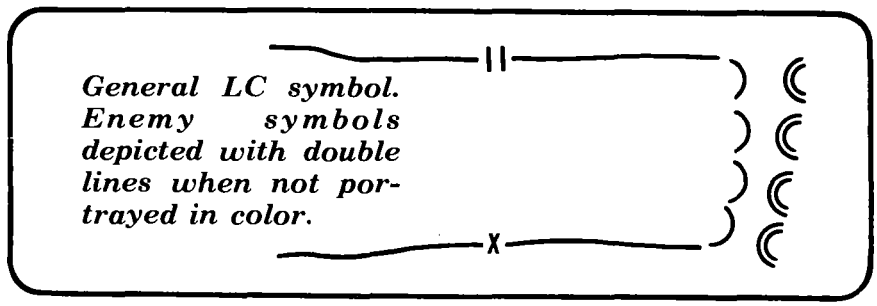
Limit of advance . . . An easily recognized terrain feature beyond which attacking elements will not advance.



Limited visibility operations . . . Operations conducted at night and during other periods of reduced visibility.

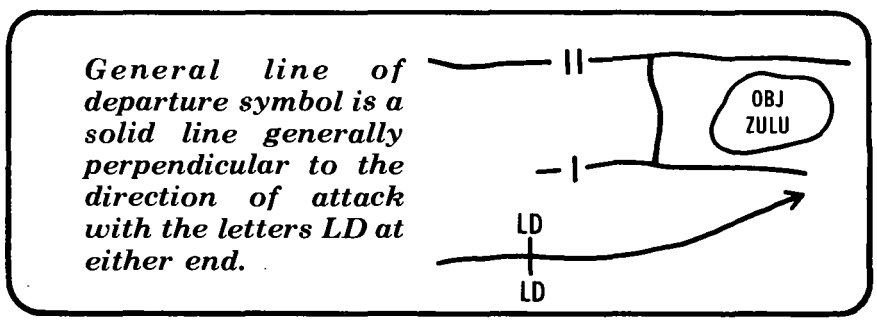
Lines of communication (LOC) . . . All the routes (land, water, and air) that connect an operating military force with one or more bases of operations and along which supplies and military forces move.

Line of contact (LC) . . . A general trace delineating the location where two opposing forces are engaged.



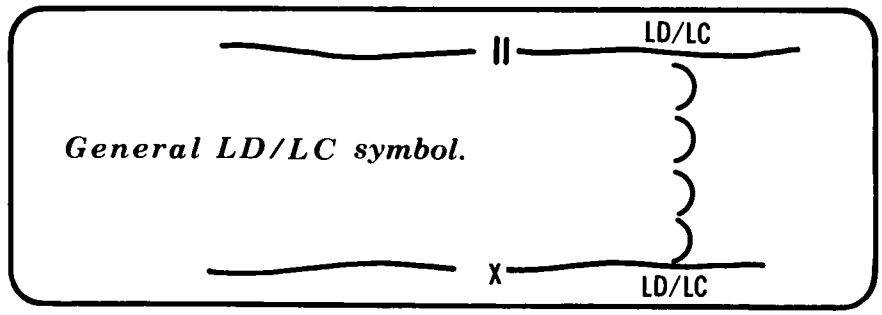
See also: line of departure, line of departure is line of contact, forward edge of the battle area (FEBA), forward line of own troops (FLOT).

Line of departure (LD) . . . A line designated to coordinate the commitment of attacking units or scouting elements at a specified time of attack. A jumpoff line.



See also: line of contact, line of departure is line of contact, time of attack.

Line of departure is line of contact (LD/LC) . . . The designation of forward friendly positions as the line of departure when opposing forces are in contact.

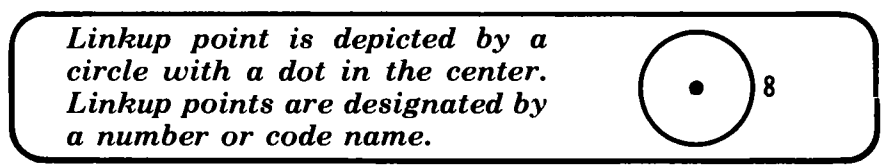


See also: line of contact, line of departure.

Linkup . . . A meeting of friendly ground forces (e.g., when an advancing force reaches an objective area previously seized by an airborne or airmobile force, when an encircled element breaks out to rejoin friendly forces, or when converging maneuver forces meet).

See also: linkup point.

Linkup point . . . An easily identifiable point on the ground where two forces conducting a linkup meet. When one force is stationary, linkup points are normally established where the moving force's routes of advance intersect the stationary force's security elements. Linkup points for two moving forces are established on boundaries where the two forces are expected to converge.



See also: linkup.

Local security . . . Those security elements established in the proximity of a unit to prevent surprise by the enemy.

Logistic constraint . . . 1. A constraint in terms of numbers of standard obstacles by type, as defined by unit SOP, given to all tactical commanders developing obstacle plans. Materials, transportation, and construction effort availability in specific sectors dictate the constraint. Its purpose is to keep obstacle plans within limits which can reasonably be accomplished. 2. Any other logistic shortage which impacts on tactical operations.

See also: obstacle plan.

Low-level flight . . . See terrain flight.

M

Main attack . . . See attack.

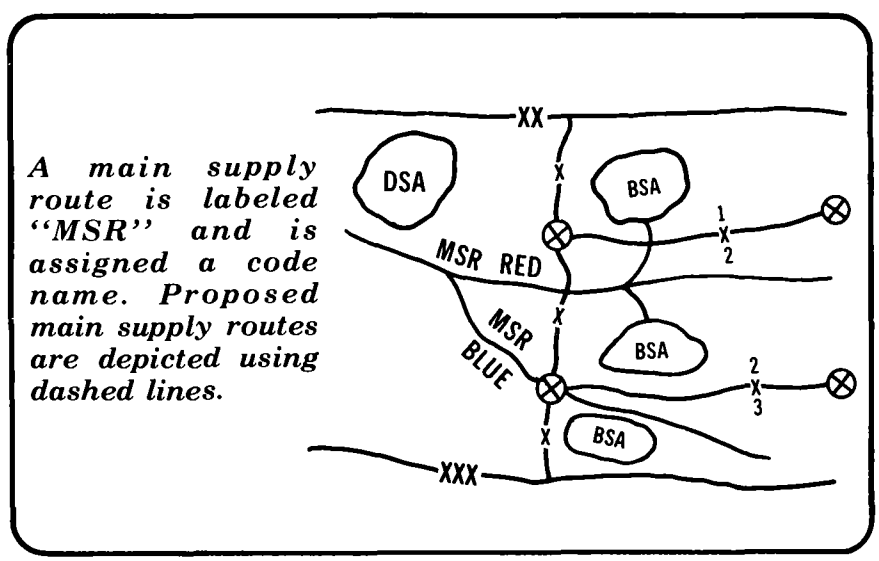
Main battle area (MBA) . . . That portion of the battlefield extending rearward from the FEBA and in which the decisive battle is fought to defeat the enemy attack. Designation of the MBA may include the use of lateral and rear boundaries.

See also: active defense, covering force area, rear area, reinforcing area.

Main body . . . 1. The principal part of a tactical command or formation. It does not include detached elements of the command such as advance guards, flank guards, covering forces, etc. 2. In a motor column, all vehicles exclusive of the column head, trail, and control vehicles which consist primarily of the task vehicles carrying the bulk of the cargo or troops with the column.

Main command post (main CP) . . . See command post.

Main supply route (MSR) . . . The route or routes designated within an area of operations upon which the bulk of traffic flows in support of military operations.



A main supply route is labeled "MSR" and is assigned a code name. Proposed main supply routes are depicted using dashed lines.

Maneuver . . . A movement to place troops, materiel, or fire in a better location with respect to the enemy.

Manipulative electronic deception . . . The manipulation of friendly electromagnetic radiations by measures such as traffic leveling, providing false traffic peaks, and padding traffic to deceive the enemy as to the intentions of friendly units.

See also: electronic deception, imitative electronic deception.

March column . . . All elements of a force using the same route for a single movement under the control of a single commander. Whenever possible, a force marches over multiple routes to reduce closing time. A large column may be composed of a number of subdivisions, each under the control of a subordinate commander. March columns, regardless of size, are composed of three elements: a head, a main body, and a trail element.

The ***head*** refers to the first vehicles of the column which normally set the pace.

The ***main body*** is made up of the major elements of column serials and march units. A serial is a major subdivision of a march column. A serial is organized as a single unit under one commander for planning, regulation, and control. A battalion task force usually forms into a serial. A march unit is a subdivision of a serial and is normally a squad, section, platoon, company, troop, or battery. It moves and halts under the control of a single commander using voice, visual signals, or radio when no other means of communication can be used.

The ***trail party*** follows the march column and includes personnel and equipment necessary for emergency vehicle repair and recovery, medical aid and evacuation, and unscheduled refueling.

Marshaling . . . 1. The process by which units in an amphibious or airborne operation assemble or move to temporary camps in the vicinity of embarkation points to complete preparations for combat or to prepare for loading. 2. The process of assembling, holding, and organizing supplies and/or equipment, especially transport vehicles, for onward movement.

Marshaling area . . . 1. The general area in which unit preparation areas and departure airfields may be located and from which air movement is initiated. 2. In amphibious operations, the designated area in which, as part of the mounting process, units are reorganized for embarkation; vehicles and equipment are prepared to move directly to embarkation areas; and housekeeping facilities are provided for troops by other units.

Marshaling plan . . . An airborne operational plan detailing the process by which units of the force complete final preparations for combat, move to departure airfields, and load for takeoff. It begins when elements of the force are literally "sealed" in marshaling camps and terminates at loading.

See also: air movement plan, ground tactical plan, landing plan.

Mask clearance . . . 1. The absence of any obstruction in the path of a trajectory. 2. The amount of clearance by which a projectile passes over any object between the weapon and its target.

Mass . . . 1. The concentration of combat power. 2. To concentrate or bring together, as to mass the fire of multiple weapons or units. 3. The military formation in which units are spaced at less than normal distances and intervals.

See also: concentration.

Massed fire . . . Fire from a number of weapons directed at a single point or small area.

Materiel damage . . . The damage to materiel caused by hostile acts. It is classified by degrees: light, moderate, or severe.

See also: radius of damage.

Maximum effective range . . . The maximum distance at which a weapon may be expected to fire accurately to achieve the desired result.

See also: effective range.

Meaconing, intrusion, jamming, and interference (MIJI) report . . . A report prepared by the C-E officer to record and report interference experienced with communications that is not caused by locally generated spurious signals or technical difficulties. For purposes of the report, the following definitions apply.

Meaconing. Transmission by the enemy of false navigational signals to confuse or hinder the navigation of aircraft and ships and to confuse ground stations.

Intrusion. The intentional insertion of radio signals into friendly transmissions to deceive or confuse friendly operations.

Jamming. The deliberate radiation of electromagnetic energy to prevent or degrade the receipt of information by a friendly receiver.

Interference. Any natural or manmade radiation of electrical energy that causes difficulty in the reception of signals. For the purpose of this report, interference is any unidentified radiation that causes an undesirable effect on friendly communications and noncommunications equipment.

Meeting engagement . . . A combat action occurring when a moving force, incompletely deployed for battle, engages an enemy force about which it has inadequate intelligence. The enemy force may be either stationary or in motion.

Military crest . . . An area on the forward slope of a hill or ridge from which maximum observation covering the slope down to the base of the hill or ridge can be obtained.

See also: topographic crest.

Military operations on urbanized terrain (MOUT) . . . All military actions planned and conducted on a topographical complex and its adjacent natural terrain where manmade construction is the dominant feature. It includes combat-in-cities, which is that portion of MOUT involving house-to-house and street-by-street fighting in towns and cities.

See also: built-up areas, combat in cities.

Minefield . . . An area of ground containing mines laid with or without pattern.

General minefield symbols.

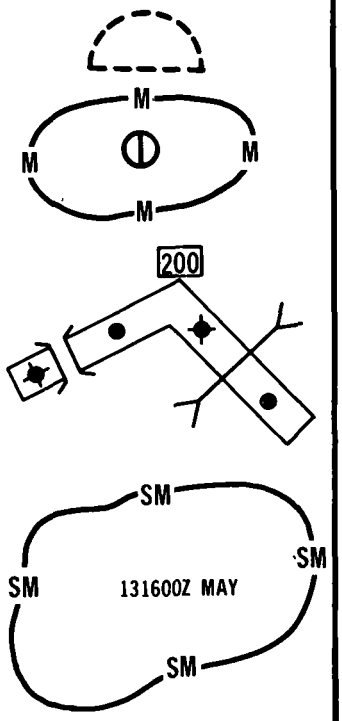
Cluster of mines.

Unfenced area containing mines of an unknown type.

Boundaries are drawn to scale, where known, to indicate actual extent of field when a series of rows are laid in a definite pattern. The number of mines is indicated in a box adjacent to the boundary, and lanes and gaps are depicted as shown.

Scatterable minefields. Date-time group designates self-destruction time.

Symbols for the type mines in the field are entered within the boundaries.



See also: gap, lane, obstacle.

Minimum range . . . 1. The least range setting of a weapon at which the projectile will clear an obstacle or friendly troops between the weapon and the target. 2. The shortest distance to which a weapon can fire from a given position. 3. The range at which a projectile or fuse will be armed.

Minimum safe distance (MSD) . . . The minimum distance in meters from desired ground zero at which a specific degree of risk and vulnerability will not be exceeded with a 99 percent assurance.

See also: troop safety, least separation distance, desired ground zero (DGZ).

Mission . . . 1. The primary task assigned to an individual, unit, or force. It usually contains the elements of who, what, when, where, and the reason therefor, but seldom specifies how. 2. The dispatching of one or more aircraft to accomplish one particular task.

See also: concept of operations, implied tasks, mission, specified tasks.

Mission-oriented protective posture (MOPP) . . . A flexible system for protection against a chemical attack devised to maximize the unit's ability to accomplish its mission in a toxic environment. This posture requires personnel to wear individual protective clothing and equipment consistent with the chemical threat, work rate imposed by their mission, temperature, and humidity without excessive mission degradation.

Mobility operations . . . Obstacle reduction by engineer units to reduce or negate the effects of existing or reinforcing obstacles. The objectives are to improve movement of maneuver/weapon systems and critical supplies and to construct covered and concealed routes to and from battle positions.

See also: breach, survivability operations, countermobility operations, terrain reinforcement.

Moderate risk (nuclear) . . . The measure of troop safety involving the medium degree of risk to friendly troops used in the computation of minimum safe distance from a nuclear detonation. It is associated with a maximum of 2.5 percent incidence of casualties or a 5 percent incidence of nuisance effects. Moderate risk should not be exceeded if troops are expected to operate at full efficiency after a friendly burst. Expressed in terms of risk to unwarned, exposed personnel; warned, exposed personnel; warned, protected personnel.

See also: emergency risk, negligible risk, troop safety.

Mounting phase . . . The period from receipt of the warning order or planning directive until aircraft take off or ships depart on the mission. During this period, joint tactical and support planning is accomplished; troops, equipment, and supplies are assembled and readied; and briefings are conducted. Marshaling takes place during the last part of the mounting phase and includes movement of participating personnel, supplies, and all equipment to departure areas, and their loading into aircraft or ships.

See also: air movement phase, assault phase, subsequent operations phase.

Movement technique . . . Manner of traversing terrain (e.g., traveling, traveling overwatch, and bounding overwatch). The likelihood of enemy contact determines which technique is used.

Traveling. A movement technique used when speed is necessary and contact with enemy forces is not likely. All elements of the unit move simultaneously with the unit leader located where he can best control.

Traveling overwatch. A movement technique used when contact with enemy forces is possible. The lead element and trailing element are separated by a short distance which varies with the terrain. The trailing element moves at variable speeds and may pause for short periods to overwatch the lead element. It keys its movement to terrain and the lead element. It overwatches at a distance such that enemy engagement of the lead element will not prevent the trailing element from firing or moving to support the lead element.

Bounding overwatch. A movement technique used when contact with enemy forces is expected. The unit moves by bounds. One element is always halted in position to overwatch another element while it moves. The overwatching element is positioned to support the moving unit by fire or fire and maneuver.

See also: overwatch.

Movement to contact . . . An offensive operation designed to gain initial ground contact with the enemy or to regain lost contact. (In NATO, the term "advance to contact" is used.)

Multiple employment . . . A concept whereby an attack helicopter unit (or air cavalry unit), because of its mobility, can be assigned more than one mission during a single operation. For example, when employed in reserve, an attack helicopter battalion can simultaneously reinforce ground units with some or all of its companies in one or more locations for a limited time or for specific missions. It can be quickly reconstituted to execute a contingency mission elsewhere in the battlefield.

Mutual support . . . 1. Support that units render to each other against an enemy because of their assigned tasks, their relative positions (with respect to each other and to the enemy), and their inherent capabilities. (It is normally associated with support rendered through fire and maneuver.) 2. A condition which exists when positions are able to support each other by direct fire, thus preventing the enemy from attacking one position without being subjected to direct fire from one or more adjacent positions. 3. In the tactical fire direction system (TACFIRE), the term used to describe the alternate method employed to continue the mission in the event of normal unit displacement or total TACFIRE computer failure.

See also: supporting distance.

N

Nap-of-the-earth flight . . . See terrain flight.

Natural obstacle . . . See obstacle.

Negligible risk (nuclear) . . . The measure of troop safety providing the least risk to friendly troops used in the computation of minimum safe distance from a nuclear detonation. It is associated with a maximum of 1 percent incidence of casualties or 2.5 percent incidence of nuisance effects. Negligible risk should not be exceeded unless significant tactical advantage will be gained. Expressed in terms of risk to unwarned, exposed personnel; warned, exposed personnel; warned, protected personnel.

See also: emergency risk, moderate risk, troop safety.

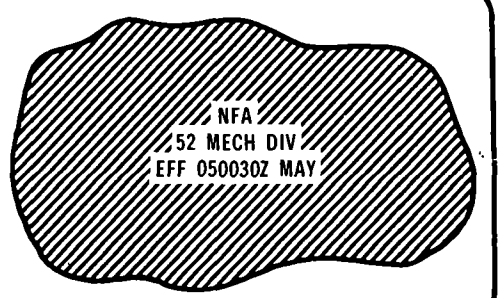
Neutralization fire . . . Fire which is delivered to temporarily eliminate or interrupt movement and/or the firing of weapons.

See also: destruction fire, suppression.

Neutralize . . . 1. To render ineffective or unusable. 2. To render enemy personnel or materiel incapable of interfering with a particular operation. 3. To render safe mines, bombs, missiles, and boobytraps.

No-fire area (NFA) . . . An area in which no fires or effects of fires are allowed.

The NFA is the designated area outlined in red which has red diagonal lines within the outlined area. Date-time group indicates the time the no-fire area becomes effective.



Noncommunications jamming . . . The deliberate radiation, reradiation, or reflection of electromagnetic signals with the object of impairing the use of noncommunications electronic devices.

See also: communications jamming, jamming.

Nuclear damage assessment . . . The determination of the damage effect to the population, forces, and resources resulting from actual nuclear attack. It is performed during the trans-attack and post-attack periods. It does not include the function of evaluating the operational significance of nuclear damage.

Nuclear weapon package . . . A discrete grouping of nuclear weapons by specific yields planned for employment in a specific area for a designated timeframe. It is employed at corps level.

See also: prescribed nuclear load, nuclear weapon subpackage.

Nuclear weapon subpackage . . . Division subelement of a corps nuclear weapon package to be executed only as part of a corps package.

See also: prescribed nuclear load, nuclear weapon package.

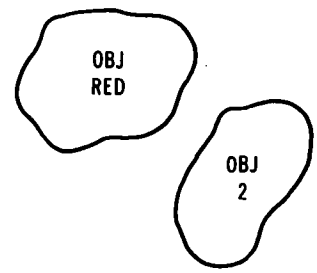
Nuclear yields . . . The energy released in the detonation of a nuclear weapon. It is usually measured in terms of the kilotons or megatons of TNT required to produce the same energy release. Yields are categorized as:

1. ***Very low***—less than one kiloton.
2. ***Low***—one kiloton to 10 kilotons.
3. ***Medium***—over 10 kilotons to 50 kilotons.
4. ***High***—over 50 kilotons to 500 kilotons.
5. ***Very high***—over 500 kilotons.

O

Objective . . . The physical object of the action taken (e.g., a definite tactical feature, the securing, seizure, or holding of which is essential to the commander's plan).

General objective symbol is depicted by a line enclosing the abbreviation "OBJ" and a letter, name, or number designation.



Objective area . . . 1. A defined geographical area within which is located an objective to be captured or reached by the military forces. 2. In airborne, airmobile, and amphibious operations, it is the proposed area of operations and includes the airhead or beachhead.

Obscuration . . . The effects of weather, battlefield dust and debris, or the use of smoke munitions to hamper observation and target-acquisition capability or to conceal activities or movement.

Obscuration smoke . . . Smoke employed on or near the enemy with the primary purpose of minimizing his vision both within and beyond his position area, or to cause an enemy force to vary speed, inadvertently change direction, deploy prematurely, or rely on nonoptical means of communication.

See also: identification smoke, screening smoke, smoke.

Observation post (OP) . . . A position from which military observations are made or fire is directed and adjusted and which possesses appropriate communications; it may also be airborne.

General observation post symbol.

Observed fire . . . Fire for which the points of impact or burst can be seen by an observer. The fire can be controlled and adjusted on the basis of observations.

Observer-target line (OT line) . . . An imaginary straight line from the observer or spotter to the target.

Obstacle . . . Any natural or manmade obstruction that canalizes, delays, restricts, or diverts movement of a force. The effectiveness of an obstacle is considerably enhanced when covered by fire. Obstacles can include: abatis, antitank ditches, blown bridges, built-up areas, minefields, rivers, road craters, terrain, and wire. Types of obstacles are:

Existing obstacles. Either natural or cultural obstacles already in existence when battle planning begins.

Cultural obstacles. A manmade feature or series of connected manmade features that disrupt or impede the movement of a combat force.

Natural obstacles. Any existing obstacle or area created by nature that disrupts or impedes the movement of a combat force.

Reinforcing obstacles. Obstacles specifically constructed, emplaced, or detonated to assist an anticipated military action or one already in progress by canalizing, delaying, or disorganizing enemy movement.

Standard obstacles. A guide normally prepared by the division engineer as an inclosure to the division SOP. It lists all the types of obstacles which will be employed by the division's units to include a drawing, a bill of materials, and any pertinent special instructions. Standard obstacles are designed specifically (e.g., a 7-hole relief face road crater or a 20-tree abatis); however, they will be employed in multiples as necessary to conform to a specific target site.

See also: counterbarrier operations, countermobility operations, logistic constraints, mobility operations, obstacle plan, obstacle system, terrain reinforcement.

*See **FM 21—30, Military Symbols,** and **FM 90—7, Barrier, Obstacle, and Denial Operations,** for specific obstacle symbols.*

Obstacle plan . . . That part of an operation plan (or order) which is concerned with the use of obstacles to enhance friendly fires or to canalize, direct, restrict, delay, or stop the movement of an opposing force. Obstacle plans are used at corps level and below.

See also: obstacle, countermobility operations, logistic constraint, engineer work coordination.

Obstacle system . . . A coordinated series of related obstacles designed to canalize and disorganize enemy forces, to delay or stop enemy movement, and to otherwise aid in the accomplishment of the unit mission.

Offense . . . A combat operation designed to carry the fight to the enemy. Offensive operations are undertaken to destroy enemy forces, secure key terrain, deprive the enemy of resources, deceive and/or divert the enemy, develop intelligence, and/or destroy the enemy's will to continue the battle. Offensive operations include deliberate attack, hasty attack, movement to contact, exploitation, pursuit, and other limited-objective operations.

Offensive air support (OAS) . . . The term "offensive air support operations" is used in NATO to describe allied tactical air operations which directly support the land battle. OAS consists of close air support and those parts of air interdiction and tactical air reconnaissance which are conducted in direct support of land operations. The term does not include tactical air transport which is considered a national responsibility. NOTE—Air interdiction missions are a part of offensive air support when specific targets attacked have a direct bearing or influence on the operations of land forces.

See also: tactical air support.

On-call target . . . A planned target to be fired on request rather than in accordance with a time schedule. The purpose of an on-call target is to reduce the reaction time required to initiate fires on a target. The degree of prearrangement for an on-call target will influence the reaction time from request to execution (the greater the prearrangement, the less the reaction time).

See also: scheduled target.

Operation . . . A military action or the carrying out of a strategic, tactical, service, training, or administrative military mission; the process of carrying on combat, including movement, supply, attack, defense, and the maneuvers needed to gain the objectives of any battle or campaign.

Operation annexes . . . Those amplifying instructions which are of such a nature or which are so voluminous or technical as to make their inclusion in the body of the plan or order undesirable.

Operation map . . . A map showing the location and strength of friendly forces involved in an operation. It may indicate predicted movements and locations of enemy forces.

Operation order (OPORD) . . . A directive issued by a commander to subordinate commanders for the purpose of effecting the coordinated execution of an operation.

See also: operation plan.

Operation overlay . . . Overlay showing the location, size, and scheme of maneuver/fires of friendly forces involved in an operation. As an exception, it may indicate predicted movements and locations of enemy forces.

See also: overlay.

Operation plan (OPLAN) . . . 1. A plan for operations extending over a considerable space and time and usually based on stated assumptions. It may cover a single operation or a series of connected operations to be carried out simultaneously or in succession. It is the form of directive employed by high echelons of command in order to permit subordinate commanders to prepare their supporting plans or orders. 2. The designation "plan" is often used instead of "order" in preparing for operations well in advance. An operation plan may be put into effect at a prescribed time or on signal; and it then becomes the operation order.

See also: operation order, contingency plan.

Operational command . . . 1. Operational command is synonymous with operational control and is uniquely applied to the operational control exercised by the commanders of unified and specified commands over assigned forces. 2. NATO usage: The authority granted commanders to deploy units, to reassign forces, and to retain or delegate operational and/or tactical control as may be deemed necessary. It does not of itself include responsibility for administration or logistics.

See also: operational control.

Operational control (OPCON) . . . The authority delegated to a commander to direct forces provided him so that he may accomplish specific missions or tasks which are usually limited by function, time, or location; and to deploy units concerned and to retain or assign tactical control of those units. It does not, of itself, include administrative or logistic responsibility, discipline, internal organization, or unit training.

See also: assign, attach, detached unit, operational command.

Operational exposure guide (OEG) . . . Method used to specify the acceptable level of radiation exposure for friendly troops during a tactical operation. It is used for operational planning and requires records of radiation exposure.

See also: radiation status.

Operations security (OPSEC) . . . All measures taken to maintain security and achieve tactical surprise. It includes countersurveillance, physical security, signal security, and information security; and it involves the identification and elimination or control of indicators which can be exploited by hostile intelligence organizations.

Order . . . A communication—written, oral, or by signal—which conveys instructions from a superior to a subordinate. In a broad sense, the terms "order" and "command" are synonymous. However, an order implies discretion as to the details of execution whereas a command does not.

Order of battle . . . Intelligence pertaining to identification, strength, command structure, and disposition of personnel, units, and equipment of any enemy force.

Orders group . . . A standing group of key personnel that a commander at any level desires present when he issues his concept of the operation and his order.

Organic . . . Assigned to and forming an essential part of a military organization; an element normally shown in the unit's table of organization and equipment (TOE).

See also: assign, attach, operational control (OPCON).

Organization . . . 1. Any military unit or larger command composed of two or more smaller units. In this meaning, a military element of a command is an organization in relation to its components and a unit in relation to higher commands. 2. The definite structure of a military element prescribed by a component authority such as a table of organization.

See also: unit.

Organize for combat . . . To develop an organization in such a way that the unique capabilities of different type forces complement each other.

See also: task organization.

Other intelligence requirements (OIR) . . . Information required (not as essential elements of information) on other capabilities, vulnerabilities, and characteristics of the enemy and area of operations which may affect, but will not prevent, the accomplishment of the mission.

Overlay . . . A printing or drawing on a transparent or translucent medium at the same scale as a map or chart to show details not appearing or requiring special emphasis on the original.

See also: operation overlay.

Overwatch . . . 1. The readiness of a unit or part of a unit to fire or maneuver as a result of enemy actions against another friendly unit. 2. The tactical role of an element positioned to observe the movement of another element and to support it with fires.

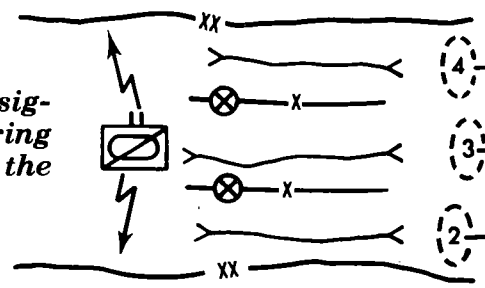
See also: movement technique.

P

Passage lanes . . . Areas along which a passing unit moves to avoid stationary units and obstacles.

General lane symbol.

Passage lanes designated for a covering force to move into the main area.



See also: lane.

Passage of command . . . The exchange of responsibility for a sector or zone between the commanders of two units. The time when the command is to pass is determined by mutual agreement between the two unit commanders unless directed by higher headquarters.

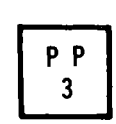
See also: passage of lines, handoff, relief in place.

Passage of lines . . . Passing one unit through the positions of another, as when elements of a covering force withdraw through the forward edge of the main battle area, or when an exploiting force moves through elements of the force that conducted the initial attack. A passage may be designated as a forward or rearward passage of lines.

See also: passage of command.

Passage point . . . A place where units will pass through one another either in an advance or withdrawal. It is located where the commander desires subordinate units to physically execute a passage of lines.

General passage point symbol is depicted by a square with the abbreviation "PP" and a number or letter designation within the square.



Passive air defense . . . Measures other than active air defense taken to minimize the effects of hostile air action, including cover, concealment, camouflage, dummy positions, and dispersion.

See also: active air defense, air defense.

Pathfinders . . . 1. Experienced aircraft crews who lead a formation to the drop zone, release point, or target. 2. Teams dropped or airlanded at an objective to establish and operate navigational aids for the purpose of guiding aircraft to drop and/or landing zones. 3. Teams air delivered into enemy territory for the purpose of determining the best approach and withdrawal lanes, landing zones, and sites for heliborne forces.

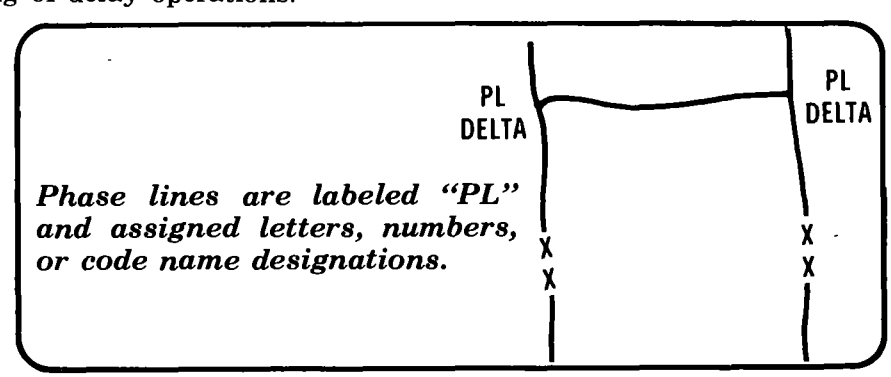
Patrol (ground) . . . A detachment sent out by a larger unit for the purpose of gathering information or conducting combat operations.

Penetration . . . An offensive form of maneuver that seeks to break through the enemy's defensive position, widen the gap created, and destroy the continuity of his positions.

Perimeter defense . . . A defense without an exposed flank consisting of forces deployed along the perimeter of the defended area.

Phase . . . A specific part of an operation that is different from those that precede or follow. Phasing assists in planning and controlling and may be indicated in terms of time (preparatory fire phase), distance (intermediate objective or report line), terrain (crossing of an obstacle), or occurrence of an event (commitment of a reserve). It is not to be confused with a ***phase line.*** It is normally associated with operations of larger units and with special operations (e.g., river crossing and airborne operations).

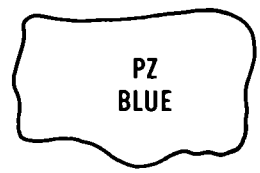
Phase line (PL) . . . A line utilized for control and coordination of military operations. It is usually a recognizable terrain feature extending across the zone of action. Units always report crossing phase lines, but do not halt unless specifically directed. Phase lines are often used to prescribe the timing of delay operations.



Physical security . . . That part of security operations concerned with physical measures designed to safeguard personnel; to prevent unauthorized access to equipment, facilities, materiel,and documents; and to safeguard them against espionage, sabotage, damage, and theft.

Pickup zone (PZ) . . . A geographical area used to pick up troops and/or equipment by helicopter.

General pickup zone symbol.

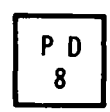


Planned target . . . A target on which fire is prearranged. The degree of prearrangement will vary. Individually planned targets may be further subdivided into either scheduled or on-call targets.

See also: on-call target, scheduled target.

Point of departure . . . In night attacks, a specific place on the line of departure where a unit will cross.

Depicted by a square with the abbreviation "PD" and a number or letter designation within the square.



Pop-up point (PUP) . . . The location at which close air support fighter aircraft quickly gain altitude for target acquisition and engagement. This point occurs at the end of low-level terrain flight to avoid detection or prevent effective engagement by the enemy.

See also: target box.

Position . . . 1. A location or area occupied by a military unit. 2. The location of a weapon, unit, or individual from which fire is delivered upon a target. Positions may be classified as primary positions, alternate positions, and supplementary positions.

See also: battle position.

Position defense . . . The type of defense in which the bulk of the defending force is disposed in selected tactical localities where the decisive battle is to be fought. Principal reliance is placed on the ability of the forces in the defended localities to maintain their positions and to control the terrain between them. The reserve is used to add depth, to block, or to restore the battle position by counterattack. It is normally conducted by infantry forces.

Preclusion of damage . . . A nuclear planning restriction used in conjunction with least separation distance to avoid damage to important structures. If appropriate, it is included in the commander's guidance.

See also: least separation distance, preclusion of obstacles.

Preclusion of obstacles . . . A nuclear planning restriction used in conjunction with least separation distance which, if appropriate, is included in the commander's guidance. It can include preclusion of fallout and tree blowdown.

See also: least separation distance, preclusion of damage.

Preclusion oriented analysis . . . Analysis of initial weapon sizes selected for those aimpoints chosen to maximize lethal coverage of ***probable*** enemy locations within safety and collateral damage requirements.

See also: least separation distance.

Preinitiation . . . Premature detonation of a nuclear weapon resulting in significantly reduced yield.

Preparation fires . . . An intense volume of prearranged ground, air, and/or naval fire delivered to soften enemy defenses before an attack.

Preplanned mission request . . . A request for air support that is submitted in accordance with a schedule that permits detailed mission coordination and planning.

Pre-positioned supplies . . . Supplies located at or near the point of planned use or at other designated locations to reduce reaction time and insure resupply.

Prescribed load . . . That quantity of combat essential supplies and repair parts (other than ammunition) authorized by major commanders to be on hand in units and which is carried by individuals or on unit vehicles to enable a unit to sustain itself until resupply can be effected. It is normally a 15-day level. The prescribed load is continuously reconstituted as used.

Prescribed nuclear load (PNL) . . . A specified quantity of nuclear weapons to be carried by a delivery unit. The establishment and replenishment of this load after each expenditure is a command decision which is dependent on the tactical situation; the nuclear logistic situation; and the capability of the unit to transport, protect, and use the load.

See also: nuclear weapon package, nuclear weapon subpackage.

Primary position . . . A place for a weapon, unit, or individual to fight which provides the best means to accomplish the assigned mission.

See also: alternate position, battle position, position, successive positions, supplementary positions.

Principal direction of fire . . . The direction of fire assigned or designated as the main direction in which a weapon will be fired. It is selected based on the enemy, mission, terrain, and weapons capability.

Priority of fires . . . Direction to a fire support planner to organize and employ fire support means in accordance with the relative importance of the supported unit's missions.

Priority of support . . . Priorities set by the commander in his concept of the operation and during execution to insure that combat support and combat service support are provided to subordinate elements in accordance with their relative importance to accomplishing the mission.

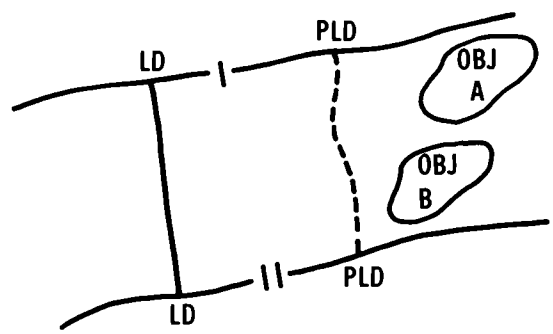
Priority target . . . A target on which the delivery of fires takes precedence over all the fires for the designated firing unit/element. The firing unit/element will prepare, to the extent possible, for the engagement of such targets. A firing unit/element may be assigned only one priority target on final protective fires (FPF) at a time.

Probable error in height (PEH) . . . That vertical distance above and below the desired height of burst within which there is a 50 percent probability that a weapon will detonate.

See also: height of burst.

Probable line of deployment . . . A line previously selected on the ground where attacking units deploy prior to beginning an assault; it is generally used under conditions of limited visibility.

General probable line of deployment symbol is a dashed black line with the letters PLD.



Program of targets . . . A tabulation of planned targets of a similar nature. A program of targets may be initiated on call, at a specified time, or when a particular event occurs. Targets are fired in a predetermined sequence.

Protect (Guard). . . See security operations.

Pursuit . . . An offensive operation against a retreating enemy force. It follows a successful attack or exploitation and is ordered when the enemy cannot conduct an organized defense and attempts to disengage. Its object is to maintain relentless pressure on the enemy and completely destroy him.

See also: direct pressure force, encircling force, exploitation.

Q

Quartering party . . . A group of unit representatives dispatched to a probable new site of operations in advance of the main body for the purpose of securing, reconnoitering, and organizing an area prior to the main body's arrival and occupation.

R

Radiation absorbed dose (RAD) . . . A measure of any ionizing radiation in which energy is imparted to any matter.

$$1 \text{ rad} = \frac{100 \text{ ergs of energy}}{\text{grams of absorber}}$$

For Army operations, the formula is used as the standard unit of measurement.

See also: immediate transient incapacitation dose, immediate permanent incapacitation dose, latent lethality dose, radiation status, radiation dose, radiation dose rate.

Radiation dose (dosage) . . . The total amount of ionizing radiation received by a specified area of the body or by the whole body. The units of measure used in military training and operations are rad and millirad.

See also: radiation dose rate, radiation absorbed dose.

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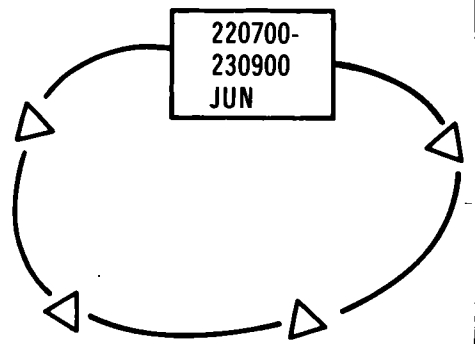
Radiation dose rate . . . The radiation dose (dosage) absorbed per unit of time. A radiation dose rate can be set at some particular unit of time (e.g., H+1 hour would be called H+1 radiation dose rate).

The intensity expressed in rad/hr may be shown inside the triangular signs of the isointensity curve. The times of the beginning (BF) and the end (EF) of radioactive fallout may be shown in a rectangular box as part of the symbol.



See also: radiation absorbed dose, radiation dose.

Radiation status . . . Criteria to assist the commander in measuring unit exposure to radiation based on total past cumulative dose in rads. Categories are as follows:

a. Radiation status—0 (RS-0) No previous exposure history.

b. Radiation status—1 (RS-1) Negligible radiation exposure history (more than 0, but less than 71 rads).

c. Radiation status—2 (RS-2) Significant but not a dangerous dose of radiation (more than 70, but less than 151 rads).

d. Radiation status—3 (RS-3) Unit has already received a dose of radiation which makes further exposure dangerous (more than 150 rads).

See also: operational exposure guide, radiation absorbed dose, radiation dose.

Radius of action . . . The maximum distance a ship, aircraft, or vehicle can travel away from its base along a given course with normal combat loads and return without refueling while allowing for all safety and operating factors.

Radius of damage (RD) . . . The distance from ground zero at which a single target element has a 50 percent probability of receiving the specified degree of damage.

See also: damage estimation, materiel damage, collateral damage.

Radius of target (RT) . . . The radius of a circular target area or an area target that is equated to a circle.

See also: target.

Radius of vulnerability (RV) . . . The radius of a circle within which friendly troops may become casualties or equipment may be damaged.

See also: troop safety, target.

Raid . . . An offensive tactical operation, usually of small scale and based on good intelligence, involving swift movement into hostile territory to secure information, confuse the enemy, destroy his installations, or liberate personnel, and ending with a planned withdrawal.

Range . . . 1. The distance between any given point and an object or target. 2. The extent or distance limiting the operation or action of something, such as the range of an aircraft, ship, or gun. 3. The distance which can be covered over a hard surface by a ground vehicle with its rated payload, using the fuel in its tank and in cans normally carried as part of the ground vehicle equipment. 4. An area equipped for practice in shooting at targets. In this meaning, also called "target range."

Rear area . . . The area to the rear of the main battle area in which supply, maintenance support, communication centers, and administrative echelons are located. A division's rear area extends from brigade rear boundaries (rear of the main battle area) to the division's rear boundary. A corps' rear area extends from division rear boundaries to the corps' rear boundary.

See also: active defense, brigade support area, division support area.

Rear area combat operations (RACO) . . . Operations undertaken in the rear area to protect units, lines of communications, installations, and facilities from enemy attack or sabotage or from natural disaster; to limit damage; and to reestablish support capabilities.

Rear command post . . . See command post.

Rear echelon . . . 1. Generic term used to describe all elements normally located in the rear area. 2. Those units or elements thereof that are not required in the airhead or beachhead. These units normally remain in the departure area.

See also: assault echelon, followup echelon.

Rear guard . . . The rearmost elements of an advancing or withdrawing force. It has the following functions: 1. To protect the rear of a column from hostile force. 2. During the withdrawal, to delay the enemy. 3. During the advance, to keep supply routes open.

See also: security operations.

Rear obstacle . . . Obstacles used by corps or division in the rear area to limit deep penetrations or to protect critical terrain.

Reconnaissance (RECON) . . . A mission undertaken to obtain information by visual observation or other detection methods about the activities and resources of an enemy or potential enemy or about the meteorologic, hydrographic, or geographic characteristics of a given area.

Reconnaissance by fire . . . A method of reconnaissance in which fire is placed on a suspected enemy position to cause the enemy to disclose his presence by movement or return fire.

Reconnaissance in force . . . A limited-objective operation conducted by a strong force to discover or test the enemy's dispositions, strengths, and weaknesses and to force a reaction by his reserves or fire support elements. The commander ordering the mission is prepared to extricate the force or exploit its success.

Reconnaissance patrol (ground) . . . A small patrol used to gain information about the enemy, preferably without his knowledge.

See also: patrol, reconnaissance.

Recovery operations . . . Extricating damaged or disabled equipment and moving it to locations where repairs can be made.

Registration fire . . . Fires used to obtain accurate firing data corrections.

Reinforce . . . To strengthen a force by committing additional forces, supporting elements, or supporting fires.

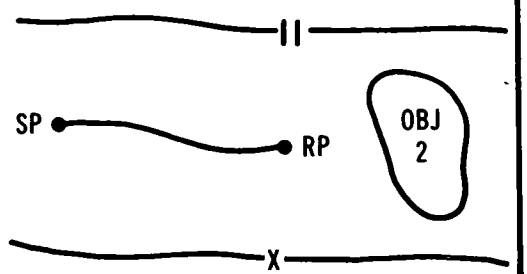
Reinforcing (R) . . . An artillery mission requiring one artillery unit to augment the fires of another artillery unit.

See also: direct support (DS), general support (GS), general support reinforcing (GSR).

Reinforcing obstacles . . . See obstacle.

Release point (RP) . . . 1. A clearly defined control point on a route at which specified elements of a column of ground vehicles or flight of aircraft revert to their respective commanders, each one of these elements continuing its movement towards its own appropriate destination. 2. In dismounted attacks, especially at night, that point at which a commander releases control of subordinate units to their commanders/leaders.

General release point symbol is graphically depicted as a dot with the abbreviation "RP." A line or arrow will normally join the start point (SP) and the release point.



See also: start point.

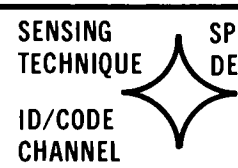
Relief in place . . . An operation in which a unit is replaced in combat by another unit. Responsibilities for the combat mission and the assigned sector or zone of action of the replaced unit are assumed by the incoming unit.

Remotely piloted vehicle (RPV) . . . A remotely piloted airborne reconnaissance, surveillance, and target-acquisition and designation device. RPVs provide timely and accurate intelligence and locate targets behind enemy lines.

General RPV symbol.

Remote sensors (REMS) . . . Remotely monitored devices implanted in an area to monitor personnel and/or vehicle activity. A sensor system consists of remote sensors, sensor relays, and sensor monitoring equipment. Replaces unattended ground sensors (UGS).

General REMS symbol.



Required supply rate (RSR) . . . The amount of ammunition, expressed in rounds per weapon per day, estimated to be required to sustain operations of a unit without restriction for a specified period.

See also: controlled supply rate.

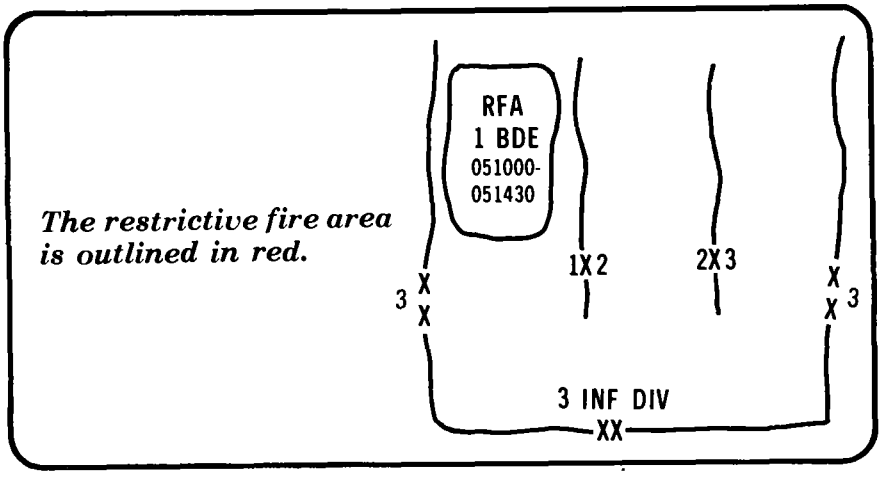
Reserve . . . That portion of a force withheld from action at the beginning of an engagement so as to be available for commitment at a decisive moment. Any force not engaged or lightly engaged may also be designated or employed as a reserve.

See also: committed forces, uncommitted forces.

Residual nuclear radiation . . . All nuclear radiation that is emitted beyond one minute after a nuclear detonation.

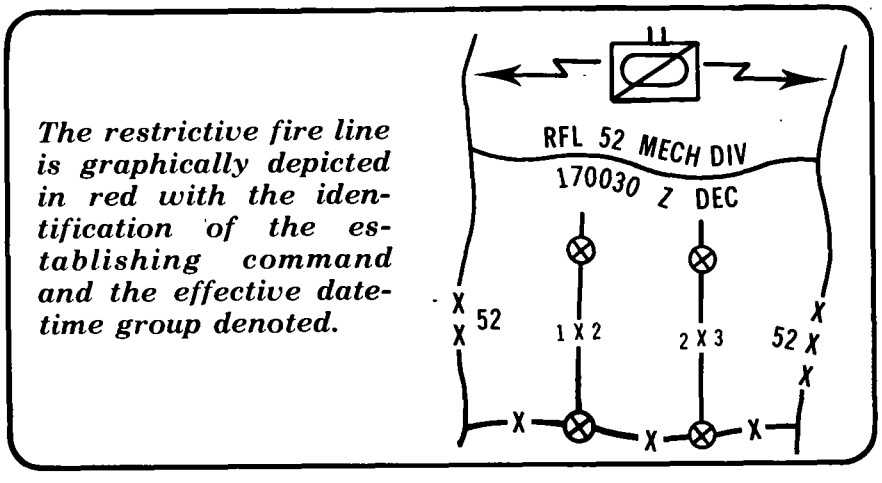
See also: governing effect.

Restrictive fire area (RFA) . . . An area in which specific restrictions are imposed and into which fires in excess of those restrictions will not be delivered without prior coordination with the establishing headquarters. A restrictive fire area may be established at battalion and higher levels. It is generally located on identifiable terrain to facilitate recognition from the air.



The restrictive fire area is outlined in red.

Restrictive fire line (RFL) . . . A line established to coordinate fires between heliborne or airborne forces and linkup forces or between any converging friendly forces (one or both of which may be moving). An RFL prohibits fires or the effects of fires across the line without prior coordination with the affected force. It is established by the common commander of the converging forces on identifiable terrain. Replaces fire coordination line.



The restrictive fire line is graphically depicted in red with the identification of the establishing command and the effective date-time group denoted.

Restrictive fire plan . . . A safety measure for friendly aircraft which establishes airspace that is reasonably safe from friendly surface-delivered nonnuclear fires.

See also: airspace coordination area.

Retain . . . A mission requiring a unit to specifically prevent the enemy from occupying a position, terrain feature, or manmade object.

See also: defend.

Retirement . . . An operation in which a force not in contact with the enemy conducts an administrative movement to the rear.

See also: delay, delaying operation, retrograde operation, withdrawal.

Retrograde movement/retrograde operation . . . Any movement of a command to the rear or away from the enemy. It may be forced by the enemy or may be made voluntarily. Such movements may be classified as withdrawal, retirement, or delaying operations.

Reverse slope . . . Any slope that descends away from the enemy.

Reverse slope defense . . . A defense area organized on any slope which descends away from the enemy.

River bank . . . In river crossing operations, river banks are referred to as the entry bank and the exit bank. The entry bank is that side of a water obstacle first encountered by friendly troops; the exit bank is opposite the entry bank.

See also: river crossing, bridgehead, bridgehead line.

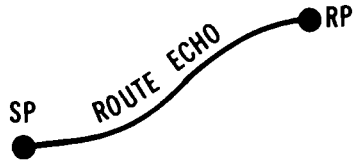
River crossing . . . An operation conducted as a part of and in conjunction with other operations to rapidly overcome a water obstacle. Tactical objectives assigned by higher headquarters may or may not include terrain objectives within the bridgehead; however, terrain objectives and/or space are required to insure the security of the force and crossing sites.

See also: beachhead, beachhead line.

Roll up . . . A maneuver following a successful penetration in which a force turns against the enemy positions from the flanks as opposed to rupturing successive defense lines.

Route . . . The prescribed course to be traveled from a specific point of origin to a specific destination.

General route symbol is depicted by a line which indicates the specific course of travel. Often begins with a start point and ends at a release point. Designated by a code name or letter.



Route classification . . . Classification assigned to a route indicating the heaviest vehicle that can be accepted. It is based on the weakest bridge or portion of the route.

Route reconnaissance . . . A directed effort to obtain detailed information of a specified route and all terrain from which the enemy could influence movement along that route.

See also: area reconnaissance, zone reconnaissance.

Rules of engagement . . . 1. Directives of the force headquarters that delineate the circumstances and limitations under which US forces will initiate and/or continue combat engagement with other forces encountered. 2. In air defense, directives that delineate the circumstances under which weapons can fire at an aircraft. The right of self-defense is always preserved.

Rupture . . . To quickly create a gap in enemy defensive positions.

Rupture force . . . The force that penetrates enemy forces and opens a gap for the remainder of the task force to pass through.

Ruse . . . A trick designed to deceive the enemy, thereby obtaining an advantage. It is characterized by deliberately exposing false information to the collection means of the enemy.

See also: demonstration, display, feint.

S

Salient . . . An outward bend in the trace of the forward line of friendly troops or the course of a river.

Scheduled target . . . A planned target on which fire is to be delivered in accordance with a time sequence. The time sequence may be related to H-hour or any other time reference; however, once this reference has been established, the scheduled target will have a definite time sequence.

See also: on-call target, planned target.

Scheme of maneuver . . . That part of a tactical plan to be executed by a maneuver force in order to secure its assigned objectives or hold its assigned area.

Screen . . . A security mission that maintains surveillance for a larger force to provide early warning and a means of controlling fires, guiding reaction forces, and destroying or repelling enemy units within the capability of the screening force.

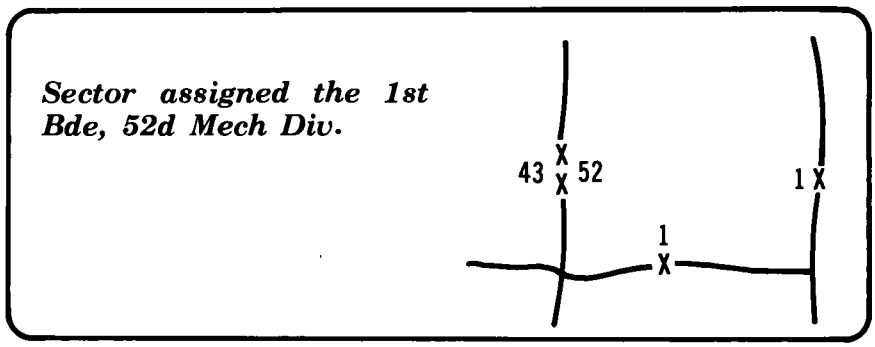
See also: security operations.

Screening operations . . . See security operations.

Screening smoke . . . Smoke employed in areas of friendly operation or in areas between friendly and enemy forces to conceal ground maneuver, breaching and recovery operations, key assembly areas, supply routes, and logistic facilities, and to degrade enemy ground and aerial observation.

See also: identification smoke, obscuration smoke, smoke.

Sector . . . A defensive area designated by boundaries within which a unit operates and for which it is responsible.



See also: battle position, boundary, comparison of defensive control measures.

Sector of fire . . . An area, limited by boundaries, assigned to a unit or a weapon to cover by fire.

Security . . . 1. Measures taken by a command to protect itself from espionage, observation, sabotage, annoyance, or surprise. 2. A condition which results from the establishment and maintenance of protective measures which insure a state of inviolability from hostile acts or influences.

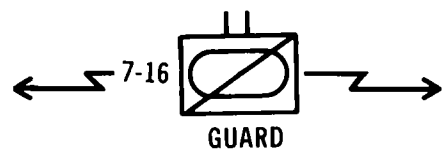
See also: security operations.

Security operations . . . Those operations designed to provide reaction time, maneuver space, and information about the enemy and protection to the main body. While primarily a cavalry-type operation, other combat units (e.g., armor, mechanized infantry) may be used. Security operations include ***area security*** operations, ***screening*** operations, ***guard*** (protect) operations, and ***covering force*** operations. The type of operation generally identifies the kinds of tasks that the force must accomplish. ***Area security*** operations are normally associated with rear areas. The other types of security operations may be oriented in any direction from the main body based on the operational situation.

A ***screening*** operation requires a unit to maintain surveillance and provide early warning by maintaining at least visual contact with enemy forces encountered. A screening force must impede and harass the enemy by organic and supporting fires and, within its capability, must destroy or repel enemy patrols. A ***guard*** operation or mission (protect mission) requires a unit to prevent enemy ground observation, direct fire, and surprise attack. A guard force destroys, stops, or delays the enemy within its capability.

A unit engaged in ***covering force*** operations operates apart from the main body to intercept, engage, deceive, disorganize, and destroy enemy forces before they can attack or halt the main body. It is best for a moving force (main body) to have two "rings" of security. The inner "ring" consists of the advance, flank, and rear guards. The outer "ring" consists of the advance, flank, and rear covering forces.

General security operations symbol.



Scout, reconniassance, or cavalry units with a security mission may be depicted by a flash arrow. The arrow length does not indicate area of responsibility, but only the general location of the unit. The specific mission may be shown graphically by writing the word SCREEN, GUARD, or COVER, below the symbol. This mission should be addressed in writing in the unit's appropriate subparagraph of the OPLAN.

Seize . . . To take possession of.

See also: contain.

Sensor . . . 1. A technical means to extend man's natural senses. 2. A device which detects and indicates terrain configuration, the presence of military targets, and other natural and manmade objects and activities by means of energy emitted or reflected by such targets or objects. The energy may be nuclear, electromagnetic (including the visible and invisible portions of the spectrum), chemical, biological, thermal, or mechanical (including sound, blast, and earth vibration).

Series of targets . . . A number of targets or groups of targets planned to support a maneuver phase on which fire is delivered in a predetermined sequence.

Signal intelligence (SIGINT) . . . The product resulting from the collection, evaluation, analysis, integration, and interpretation of all information derived from communications intelligence (COMINT), electronic intelligence (ELINT), and telemetry intelligence (TELINT).

Signal security (SIGSEC) . . . Measures intended to deny or counter hostile exploitation of electronic emissions. Includes communications security and electronic security.

Signature . . . The visible or audible effects produced when a weapon is fired or a piece of equipment operated, such as noise, smoke, flame, heat, or debris; also, an electronic emission subject to detection and traceable to the equipment producing it.

See also: weapons signature.

Single envelopment . . . Maneuver made against one flank, or around one flank, against the rear of the initial dispositions of the enemy.

See also: double envelopment, envelopment, turning movement.

Situation map . . . A map showing the tactical or the administrative situation at a particular time.

Smoke . . . An artifically produced aerosol of solid, liquid, or vapor in the atmosphere which attenuates the passage of visible light or other forms of electromagnetic radiation. Smoke is classified in three general categories: identification smoke, obscuration smoke, screening smoke.

See also: identification smoke, obscuration smoke, screening smoke.

Sortie (air) . . . One aircraft making one takeoff and one landing. An operational flight by one aircraft.

Special ammunition supply point . . . A supply point where special ammunition is stored and issued to delivery units.

General symbol for special ammunition supply point.

Special operations . . . 1. Secondary or supporting operations which may be adjuncts to various other operations and for which no one service is assigned primary responsibility. 2. Types of military operations which require specialized troops, equipment, or techniques, such as river crossings, military operations in urbanized terrain, etc.

Specified tasks . . . Those delineated in the mission received from higher headquarters.

See also: implied tasks, concept of operations, mission.

Spoiling attack . . . See attack.

Staff estimate . . . The staff officer's expert evaluation of how factors in his particular field of interest will influence the courses of action under consideration by the commander.

See also: commander's estimate.

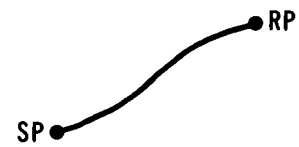
Stage field . . . A predetermined area where aircraft assemble prior to conducting an airmobile operation.

Staging area . . . 1. A general locality between the mounting area and the objective of an amphibious or airborne expedition. It is the area through which the expedition or parts thereof pass for refueling, regrouping of ships, and the exercise, inspection, and redistribution of troops. 2. A general locality containing accommodations for troops established for the concentration of troop units and transient personnel between movements over the lines of communication. Also referred to as intermediate staging area.

Standard obstacles . . . See obstacle.

Start point (SP) . . . A clearly defined initial control point on a route at which specified elements of a column of ground vehicles or flight of aircraft come under the control of the commander having responsibility for the movement.

General symbol for a start point is graphically depicted as a dot with the abbreviation "SP." A line or arrow will normally join the start point to the release point (RP).



See also: release point.

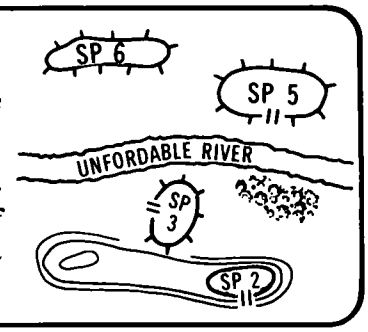
Strip area . . . A built-up area of interconnecting villages and towns along roads or valleys.

Strongpoint (SP) . . . A defensive position fortified as extensively as time and materials permit. It is essentially an antitank nest which cannot be quickly overrun or bypassed by tanks and which can be reduced by enemy infantry only with the expenditure of much time and overwhelming forces. A strongpoint is located on a terrain feature critical to the defense, or one which must be denied to the enemy. All weapons should be dug in with overhead cover in primary and alternate positions. The force assigned to establish a strongpoint must be given adequate time to construct the position.

General strongpoint symbol.

May be combined with unit size symbol.

Example of a battalion strongpoint. Direction/orientation of defense is opposite the open area and unit size symbol.



See also: battle position.

Subsequent operations phase . . . The final phase of an airborne, airmobile, or amphibious operation conducted after the assault phase. Operations in the objective area may consist of offense, defense, linkup, or withdrawal. Since Army forces seek to retain the initiative while operating in enemy territory, defense may include limited offensive operations to seize additional objectives that facilitate the defense or favor future operations and securing the airspace over and immediately contiguous to the objective area. Early ground linkup with committed forces is frequently a part of an operation. However, withdrawal without linkup after accomplishment of the mission may be planned or forced by enemy action.

See also: air movement phase, assault phase, mounting phase.

Successive positions . . . Defensive fighting positions located one after another on the battlefield. A force can conduct a delaying action from ***successive delay positions.***

See also: active defense, delay on alternate positions.

Supplementary position . . . A place to fight which provides the best means to accomplish a task that cannot be accomplished from the primary or alternate positions.

See also: alternate position, battle position, position, successive position.

Supply point distribution . . . A method of distributing supplies in which the receiving unit obtains supplies at a supply point, railhead, or truckhead and moves the supplies to its own area using its own transportation.

Support . . . 1. The action of a force or portion thereof which aids, protects, complements, or sustains any other force. 2. A unit which helps another unit in battle. Aviation, artillery, or naval gunfire may be used as a support for infantry. 3. A part of any unit held back at the beginning of an attack as a reserve. 4. An element of a command that assists, protects, or supplies other forces in combat.

Support echelon . . . 1. Those elements that furnish logistical assistance to combat units. 2. Those units that support by fire the commander's plan of maneuver.

See also: support.

Supporting attack . . . See attack.

Supporting distance . . . Distance between two units that can be traveled in time for one to come to the aid of the other. Also, for small units, the distance between two units that can be covered effectively by their fires.

See also: mutual support.

Suppression . . . Direct and indirect fires, electronic countermeasures, or smoke brought to bear on enemy personnel, weapons, or equipment to prevent effective fire on friendly forces. When suppressive measures are lifted, the enemy may once again be fully effective.

Support area . . . A designated area in which combat service support elements, some staff elements, and other elements locate to support a unit.

Suppression of enemy air defense (SEAD) . . . Any action which destroys, degrades, or obscures enemy surface air defenses for a period of time to enhance the effectiveness of friendly air operations.

See also: suppression.

Surveillance . . . A systematic observation of airspace or surface areas by visual, aural, electronic, photographic, or other means.

Survivability operations (Engineer) . . . The development and construction of protective positions such as earth berms, dug-in positions, overhead protection, and countersurveillance measures to reduce the effectiveness of enemy weapon systems.

See also: countermobility operations, mobility operations, terrain reinforcement.

Sustained rate of fire . . . Actual rate of fire that a weapon can continue to deliver for an indefinite length of time without seriously overheating.

Symbol . . . A sign composed of a diagram, number, abbreviation, color, or combination thereof, which is used to identify and distinguish a particular military unit, activity, or installation. Military symbols are graphic aids which accurately identify items of operational interest. ***FM 21—30, Military Symbols,*** and ***STANAG 2019, Military Symbols,*** are primary references governing military symbols used by the United States Army.

See also: control measures.

T

Tactical air control center (TACC) . . . The operations center of the Air Force component headquarters. The activities of the tactical air control system (TACS) are controlled by the TACC which is the senior air operations element of the TACS.

See also: tactical air coordination element (TACE).

Tactical air control party (TACP) . . . An Air Force team consisting of pilots, radio operators-maintenance and drivers (ROMADs), airborne and ground vehicles, and communications equipment required to obtain, coordinate, and control tactical air support for ground forces. A TACP is attached to each division, brigade, and battalion to facilitate coordination of tactical air support operations. The TACP operates and maintains the Air Force air request net.

See also: tactical air coordination element (TACE), forward air controller (FAC), air liaison officer (ALO).

Tactical air coordination element (TACE) . . . The tactical air coordination element is an Air Force element which operates with a corps tactical operations center (CTOC). The TACE plans and controls Air Force missions in support of corps forces and assists Army planners on matters related to air operations. It replaces DASC and the corps TACP.

See also: tactical air control party, direct air support center.

Tactical airlift (Intratheater Airlift) . . . 1. The movement of personnel and materiel by tactical air force (TAF) aircraft. All airlift is categorized as either combat support or combat service support according to the mission of the ground force supported. 2. Air Force airlift which provides the immediate and responsive air movement and delivery of combat troops and supplies directly into objective areas through airlanding, extraction, airdrop, or other delivery techniques; and the use of air transport in direct support of airborne assault, carriage of air transported forces, tactical air supply, evacuation of casualties from forward airfields, and special operations.

See also: tactical air support.

Tactical air operations . . . USAF term for air operations involving the six combat functions of counterair, close air support, air interdiction, tactical air reconnaissance, tactical airlift operations (including air evacuation), and special operations performed by tactical air forces.

See also: counterair, air interdiction, tactical air support, apportionment, allocation.

Tactical air support . . . A USAF term, air operations which directly support the land battle. These operations include close air support, tactical air reconnaissance, battlefield air interdiction (NATO), and tactical airlift.

See also: close air support, tactical air reconnaissance, battlefield air interdiction, tactical airlift, tactical air operations, offensive air support, apportionment, allocation.

Tactical air support element (TASE) . . . An element of the US Army division or corps TOC consisting of G-2 and G-3 air personnel who coordinate and integrate tactical air support with current tactical ground operations.

Tactical command post (TAC CP) . . . See command post.

Tactical counterintelligence . . . Actions designed to thwart the enemy's intelligence collection by denying and shielding friendly intentions and actions.

Tactical intelligence zone . . . A geographic guideline for the acquisition and transfer of information concerning the enemy, weather, and terrain. The tactical intelligence zone is used in planning for the employment of intelligence assets. Depth of the tactical intelligence zone varies with the level of command. A higher commander's tactical intelligence zone includes the zones of subordinate units.

See also: forward line of own troops (FLOT).

Tactical operations . . . The employment of fire and maneuver units in combat.

Tactical operations center (TOC) . . . An element within the main command post which contains staff elements that permit the commander to see the battle, allocate resources, and position combat service support.

See also: command post.

Tank sweep . . . An offensive operation by armor forces designed to deliver a rapid, violent attack against an enemy force to inflict maximum casualties, disrupt control, and destroy equipment. It is normally associated with spoiling attack, reconnaissance in force, or counterattack.

Target . . . 1. A geographical area, complex, or installation planned for capture or destruction by military forces. 2. In intelligence usage, a country, area, installation, agency, or person against which intelligence operations are directed. 3. An area designated and numbered for future firing. 4. In artillery and naval gunfire support, an impact burst which hits the target. Target symbols and the target numbering system are found in ***FM 6—20, Fire Support In Combined Arms Operations.***

See also: radius of target, target oriented analysis, target reference point.

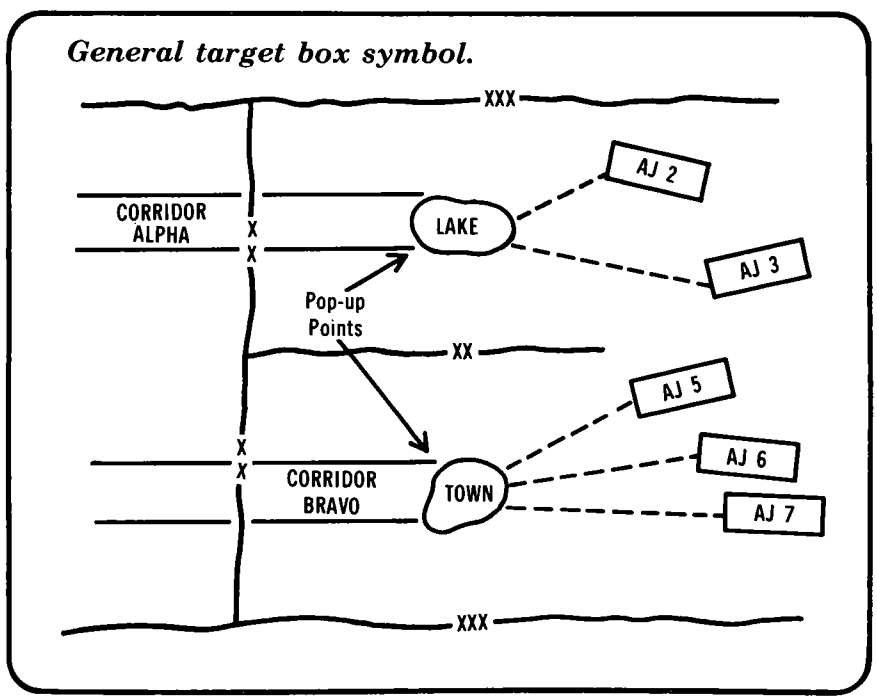
Target acquisition . . . The detection, identification, and location of targets in sufficient detail to permit attack by weapons.

Target analysis . . . The examination of a potential surface target to determine its significance to the mission of the force, the need for immediate attack, and the capability and suitability of available fire support elements for attack. Target analysis is the responsibility of FSCOORDs, FSOs, and FDOs, and is performed in varying degrees at all echelons in fire support and fire direction facilities.

Target array . . . A graphic representation of enemy forces, personnel, and facilities in a specific situation, accompanied by a target analysis.

Target box . . . Areas designated on identifiable terrain in which enemy targets are expected to appear and against which air support will be employed. Air corridors and identifiable pop-up points are preplanned and coordinated with the Air Force.

General target box symbol.



See also: pop-up point.

Target list . . . A compilation of targeting data planned to support an operation. It contains only targeting data required for computation of technical fire data.

Target of opportunity . . . A target that has not been planned (i.e., one on which fire has not been prearranged).

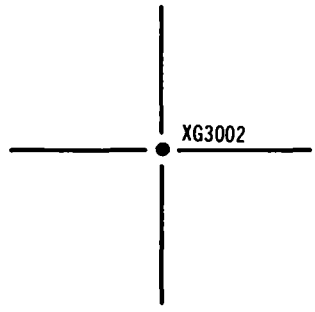
Target oriented analysis . . . Analysis of initial aimpoints chosen to determine the capabilities of available weapons for the attack of a CONFIRMED target with appropriate weapon systems that will meet the commander's requirements.

See also: troop safety, target, circular error probable, damage estimation, least separation distance.

Target overlay . . . An overlay showing the locations of targets, groups, and series as appropriate. It enables the FSCOORD to view graphically all the targets planned in support of the maneuver force.

Target reference point (TRP) . . . An easily recognizable point on the ground (either natural or manmade) used for identifying enemy targets or controlling direct fires. TRPs are usually designated by company commanders or platoon leaders for company teams, platoons, sections, or individual weapons. They can also designate the center of an area where the commander plans to distribute or converge the fires of all his weapons rapidly. TRPs are designated using the standard target symbol and target numbers issued by the FIST or FSO. Once designated, TRPs also constitute indirect fire targets.

General TRP symbol is a black cross centered on the TRP grid. Symbol marks the center of the TRP, not the size or type target. TRP numbers correspond to the target numbering system in FM 6—20, Fire Support in Combined Arms Operations, and are issued by the FIST or FSO.



Target servicing . . . The capability of a force to acquire, engage, and neutralize or destroy Threat firepower systems (tanks, combat vehicles, ATGMs, etc.) within the central battle. It includes the tasks of employing and coordinating supporting weapons such as mortars, field artillery, and tactical air, as well as countermobility and electronic warfare assets which enhance the target servicing effort.

Task force (TF) . . . 1. Based upon mission:

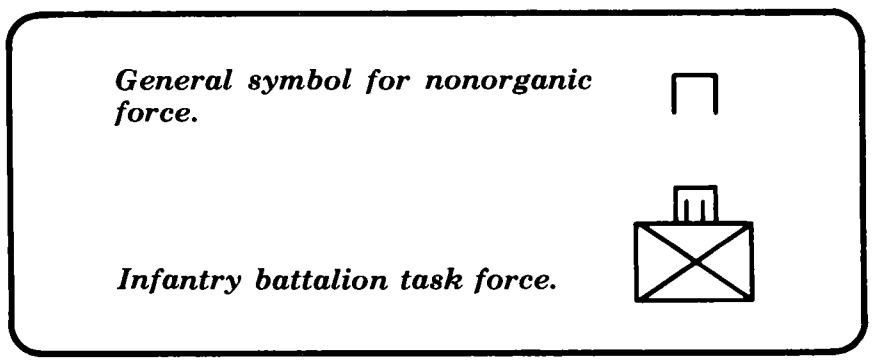
(a) A temporary grouping of units under one command formed for the purpose of carrying out a specific operation or mission.

(b) A semipermanent organization of units under one commander for the purpose of carrying out a continuing specific task.

(c) Units may be designated as a task force, regardless of attachments, whenever they are on a semi-independent mission.

(d) Brigade and higher units are normally not designated as task forces unless the operation or mission requires joint airborne, amphibious, or other special, semi-independent operations.

2. Based upon organization, a battalion-size unit of the combat arms consisting of a battalion control headquarters, at least one of its major subordinate elements (a company), and the attachment of at least one company-size element of another combat or combat support arm. An example is an infantry battalion headquarters; one or more of its organic companies; and the attachment of one or more of the following: a tank company, an armored cavalry troop, or an engineer company.



See also: battalion task force, organize for combat, task organization.

Task organization . . . A temporary grouping of forces designed to accomplish a particular mission. Task organization involves the distribution of available assets to subordinate control headquarters by attachment or by placing assets in direct support or under the operational control of the subordinate.

See also: organize for combat.

Terrain flight . . . The tactic of employing helicopters in such a manner as to utilize the terrain, vegetation, and manmade objects to degrade the enemy's ability to visually, optically, or electronically detect or locate the helicopter. This tactic involves a constant awareness of the capabilities and positions of the enemy weapons and detection means in relation to available masking terrain features and flight routes. Terrain flying involves flight close to the earth's surface and includes the tactical application of low-level, contour, and nap-of-the-earth flight techniques.

Low-level flight . . . Flight generally carried out above obstacles but at an altitude where detection by a Threat force is avoided or minimized. It is, therefore, at a constant indicated altitude and airspeed.

Contour flight . . . Flight at low altitude conforming generally to, and in the proximity of, the contours of the earth. It is characterized by varying airspeed and altitude as dictated by vegetation, obstacles, and ambient light.

Nap-of-the earth flight . . . Flight at varying airspeeds as close to the earth's surface as vegetation, obstacles, and ambient light will permit, while generally following contours of the earth.

Terrain reinforcement . . . The development of terrain to degrade enemy mobility (countermobility) or to enhance friendly survivability through the construction of fighting positions and cover.

See also: mobility operations, survivability operations.

Thermal radiation . . . The heat and light radiated from a nuclear explosion.

See also: flashblindness, governing effect.

Thickening . . . The reinforcing of units in the conduct of an active defense in order to concentrate forces to attain a desired combat ratio. In the thickening of MBA units, reinforcing elements may come from the covering force reserve units or laterally from other forces in the MBA. Thickening may also include the adjusting of boundaries in order to concentrate more forces in a smaller area.

See also: concentration, thinning.

Thinning . . . The removal of forces and intentional weakening of combat power in one part of the battle area.

See also: concentration, thickening.

Throughput distribution . . . A term used to describe the shipment from the points of origin as far forward as possible, bypassing intermediate supply activities.

Time of attack . . . The hour at which the attack is to be launched. If a line of departure is prescribed, it is the hour at which the line is to be crossed by the leading elements of the attack.

Time on target (TOT) . . . 1. The method of firing on a target in which various weapons so time their fire as to assure that all projectiles reach the target simultaneously. 2. The time at which aircraft are scheduled to attack/photograph the target. 3. The actual time at which aircraft attack/photograph the target.

Topographical crest . . . Highest point of a hill, ridge, or mountain.

See also: military crest.

Towns and cities . . . A built-up area with a population of 100,000 or less, not part of a larger urban complex.

Trafficability . . . Capability or extent to which the terrain will bear traffic or permit continued movement of a force.

Traffic control point . . . A place at which traffic is controlled either by military police or by mechanical means.

General traffic control point symbol.

Traveling . . . See movement technique.

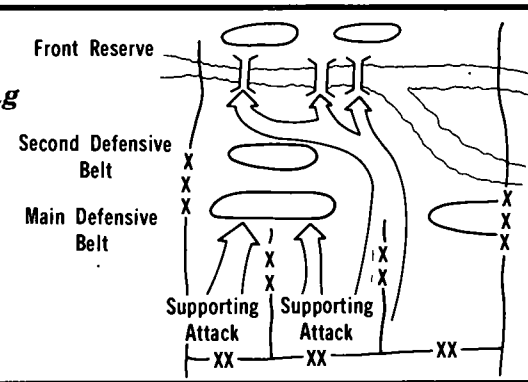
Traveling overwatch . . . See movement technique.

Troop safety . . . Limiting requirements imposed to protect friendly troops which are used in the computation minimum safe distance (MSD). It is included in commander's guidance and is divided into three DEGREES OF RISK: (1) negligible, (2) moderate, and (3) emergency. Degree of risk is used with PERSONNEL VULNERABILITY: (1) unwarned, exposed personnel; (2) warned, exposed personnel; and (3) warned, protected personnel.

See also: target oriented analysis, radius of vulnerability, minimum safe distance, governing effect.

Turning movement . . . A form of envelopment in which large units conduct an envelopment deep into the enemy's rear with most of the available combat power. Once the enveloping force has occupied its objectives, the supporting attack is discontinued.

General turning movement symbol.



See also: envelopment, double envelopment, single envelopment.

Turret-down . . . A vehicle is in turret-down position when the entire vehicle is behind cover, but the commander can still observe to the front from the turret hatch or cupola.

See also: hull-down, hide.

U

Uncommitted force . . . A force that is not in contact with an enemy force and is not already deployed on a specific mission or course of action. Uncommitted forces or least committed forces will normally constitute the reserve when no formal reserve has been constituted.

See also: committed force, reserve.

Unit . . . 1. Any military element whose structure is prescribed by competent authority, such as a table of organization and equipment; specifically, part of an organization. 2. An organization title of a subdivision of a group in a task force. 3. A standard or basic quantity into which an item of supply is divided, issued, or used. In this meaning, also called "unit of issue."

See also: organization.

Unit distribution . . . A method of distributing supplies by which the receiving unit is issued supplies in its own area with transportation furnished by the issuing agency.

Unit in contact . . . A force that is engaged with an enemy force and is normally not available for commitment elsewhere. However, the least committed unit in contact may be designated the reserve.

Unit trains . . . Combat service support personnel and equipment organic or attached to a force that provides supply, evacuation, and maintenance services. Unit trains, whether or not echeloned, are under unit control with no part of them released to the control of a higher headquarters. They are normally echeloned into combat and field trains.

See also: combat trains, field trains.

Unobserved fire . . . Fire for which the points of impact or burst are not observed.

Urban sprawl . . . The process of urbanization spreading to formerly open areas near cities over a period of time.

Urbanization . . . The growing size, number, and density of human habitations and associated linkages such as roads, powerlines, canals, and railroads.

V

Vertical envelopment . . . A tactical maneuver in which troops, either air dropped or airlanded, attack the rear and flanks of a force, in effect cutting off or encircling the force. It can be used by itself, or with a penetrating attack by ground forces to effect a linkup, or in conjunction with a ground envelopment.

See also: double envelopment, envelopment, single envelopment, turning movement.

Village . . . A built-up area with a population of 1,000 or less.

W

Warning order . . . An advance notice of an action or an order that is to follow. Usually issued as a brief oral or written message, it is intended to give subordinates time to make necessary plans and preparations. It states the mission, in general terms, and the time and place a complete order will be issued.

Weapon control status . . . See air defense weapon control status.

Weapons free . . . See air defense weapon control status.

Weapons hold . . . See air defense weapon control status.

Weapons package . . . A number of nuclear weapons by type and yield planned or approved for employment within a specific area and timespan.

See also: nuclear weapon package, nuclear weapon subpackage.

Weapon signature . . . Any smoke, vapor trail, noise, heat, flash, tracer, or flight characteristic that denotes a specific weapon system (i.e., the smoke trail of a Sagger missile, the distinctive rushing noise of the Shillelagh missile, the sharp crack of an AK-47 rifle).

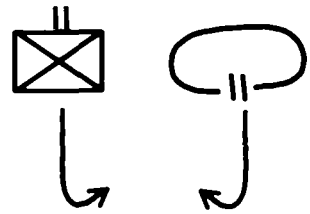
See also: signature.

Weapons tight . . . See air defense weapon control status.

Weighting . . . Those actions taken by a commander to increase the capabilities of a unit (e.g., allocation of additional organizations, allocation of priorities of fire, or reducing the size of the unit's area of responsibility).

Withdrawal . . . A retrograde operation in which a force frees itself for a new mission. The operation may be conducted with or without enemy pressure and assisted or unassisted by another unit.

General symbol for withdrawal.



See also: delaying operations, disengagement, retirement, retrograde operations.

Withdrawal not under enemy pressure . . . An operation in which all or part of a deployed force disengages from the enemy while not under enemy pressure.

Withdrawal through a rearward position . . . An operation in which a unit effecting a retrograde movement (withdrawal) passes through the sector of a unit occupying a rearward defensive position.

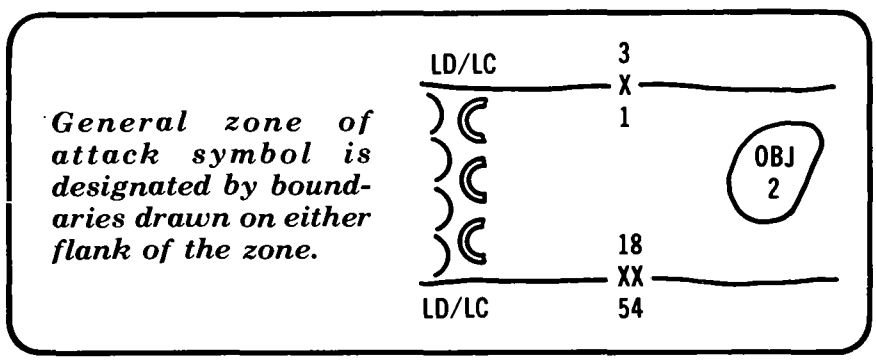
Withdrawal under enemy pressure . . . An operation in which all or part of a deployed force disengages from the enemy while under enemy pressure.

Z

Zone . . . 1. The area of responsibility assigned to a unit by the drawing of boundaries; generally applies to offensive operations. 2. Any tactical area of importance, generally parallel to the front, such as a fortified area, a defensive position, a combat zone, traffic control zone, etc. 3. A strip of several bands or belts of wire entanglements placed in depth. 4. An area in which projectiles will fall when a given propelling charge is used and the elevation is varied between the minimum and the maximum.

See also: sector.

Zone of attack . . . An area forward of the line of contact assigned to a force having a mission to attack, normally delineated by boundaries extending forward into enemy territory. It delineates an area and direction of movement when close coordination and cooperation is required between adjacent units. The next higher commander assigns a zone of attack and subordinate commanders may further subdivide it for their units. When assigned a zone of attack, units cannot maneuver into an adjacent zone without coordination with the adjacent commander or the next higher commander. They may, however, engage clearly identified enemy in an adjacent zone by direct fire so long as no friendly units are endangered. Enemy forces in the zone that do not threaten security or jeopardize mission accomplishment may be bypassed.



General zone of attack symbol is designated by boundaries drawn on either flank of the zone.

See also: clear enemy in zone, destroy enemy in zone, axis of advance, direction of attack.

Zone of fire . . . An area within which a designated ground unit or fire support ship delivers, or is prepared to deliver, fire support. Fire may or may not be observed. Normally, the zone of fire of an artillery unit coincides with the zone of action of the supported force.

Zone reconnaissance . . . A directed effort to obtain detailed information concerning all routes, obstacles (including chemical or radiological contamination), terrain, and enemy forces within a zone defined by boundaries. A zone reconnaissance mission is normally assigned when the enemy situation is in doubt or when information concerning cross-country trafficability is desired.

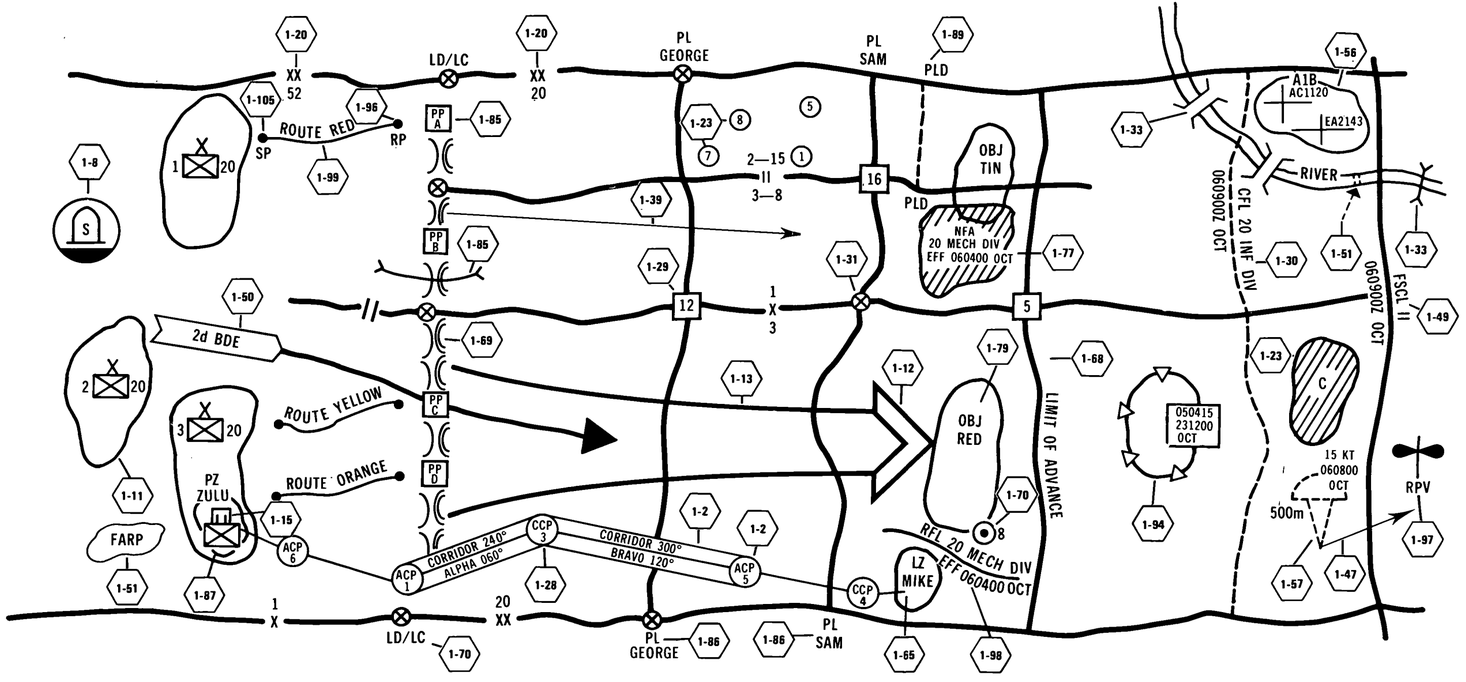
See also: area reconnaissance, route reconnaissance.

Chapter 2

GRAPHICS

CONTROL MEASURES COMMONLY EMPLOYED IN THE OFFENSE

(This example is provided only to illustrate graphical symbols and is not representative of a division operations overlay.)

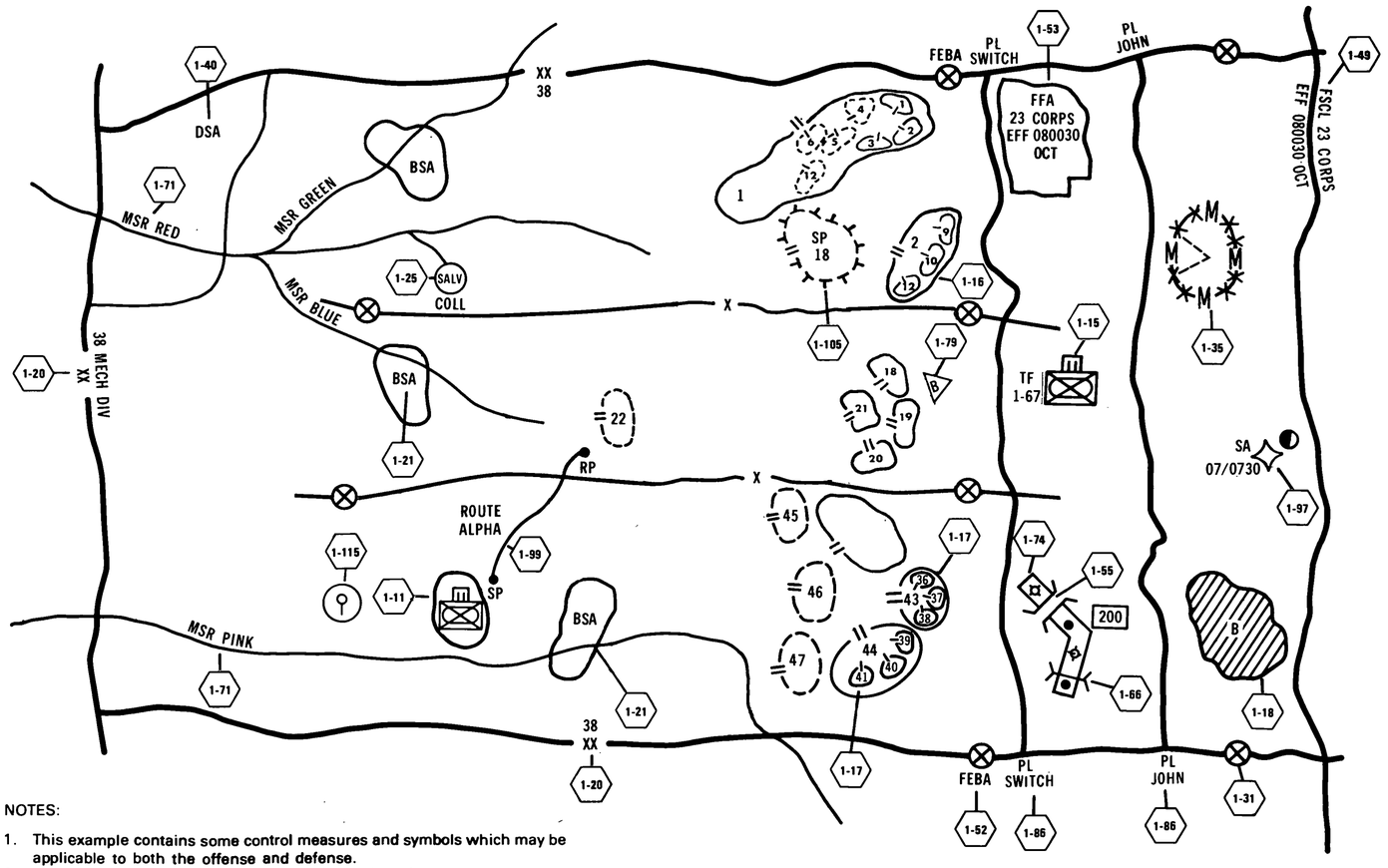


NOTES:

1. This example contains some control measures and symbols which may be applicable to both the offense and defense.
2. ⬡ Indicates page in manual where a discussion of the control measure or symbol can be found.

CONTROL MEASURES COMMONLY EMPLOYED IN THE DEFENSE

(This example is provided only to illustrate graphical symbols and is not representative of a division operations overlay.)

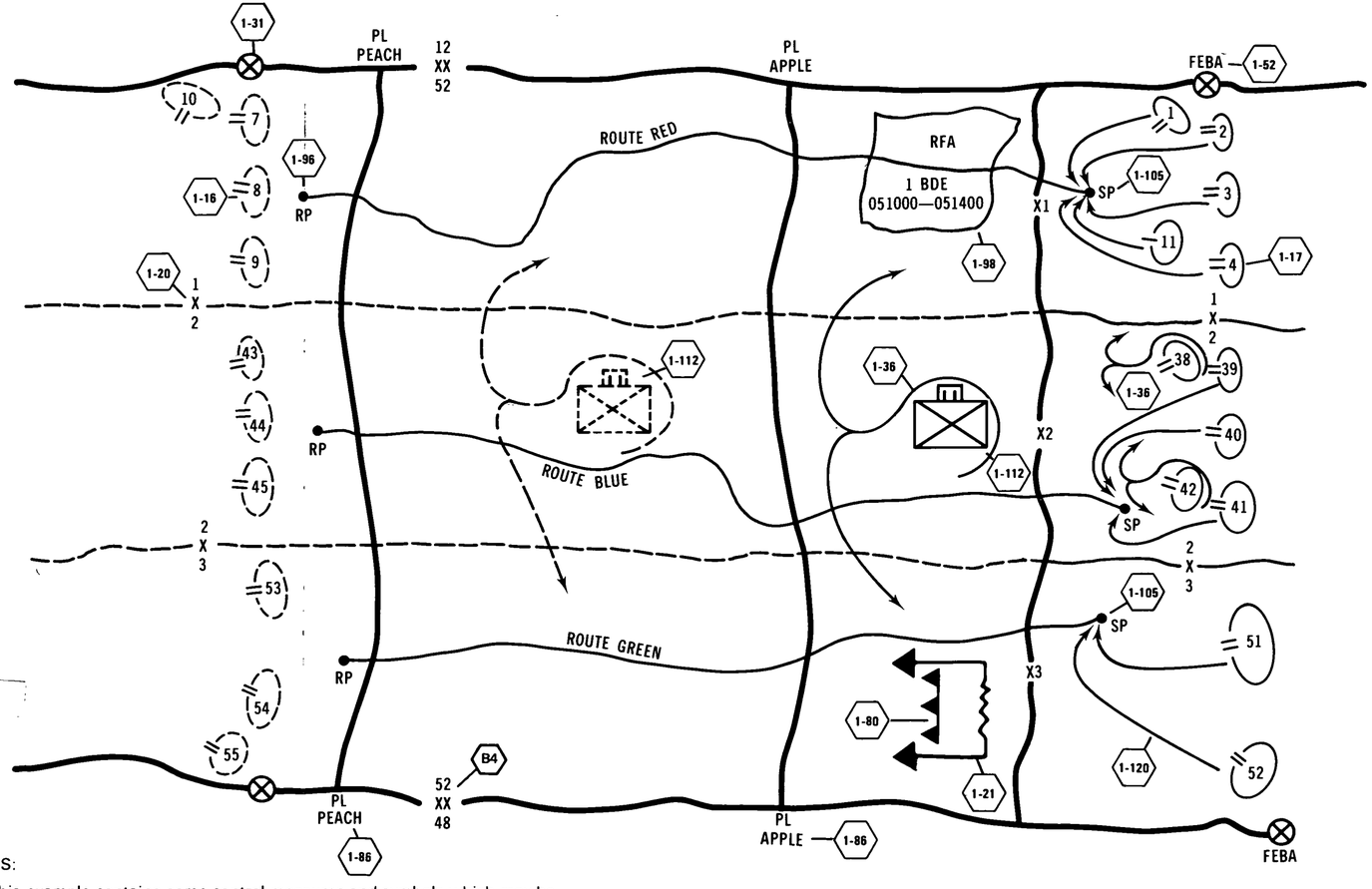


NOTES:

1. This example contains some control measures and symbols which may be applicable to both the offense and defense.
2. ⬡ Indicates page in manual where a discussion of the control measure or symbol can be found.

CONTROL MEASURES COMMONLY EMPLOYED IN RETROGRADE OPERATIONS

(This example is provided only to illustrate graphical symbols and is not representative of a division operations overlay.)



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NOTES:

1. This example contains some control measures and symbols which may be applicable to both the offense and defense.
2. ⬡ Indicates page in manual where a discussion of the control measure or symbol can be found.

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loads of ammunition, ammunition resupply, and special ammunition.

Unit Basic Load

Units are authorized basic loads of ammunition, expressed in rounds per weapon system, to sustain them in combat until they can be resupplied. The theater commander normally establishes a unit's basic load based on—

- **Its mission.**
- **The types and numbers of its weapon systems.**
- **Its transport capability.**
- **The time necessary to effect resupply.**

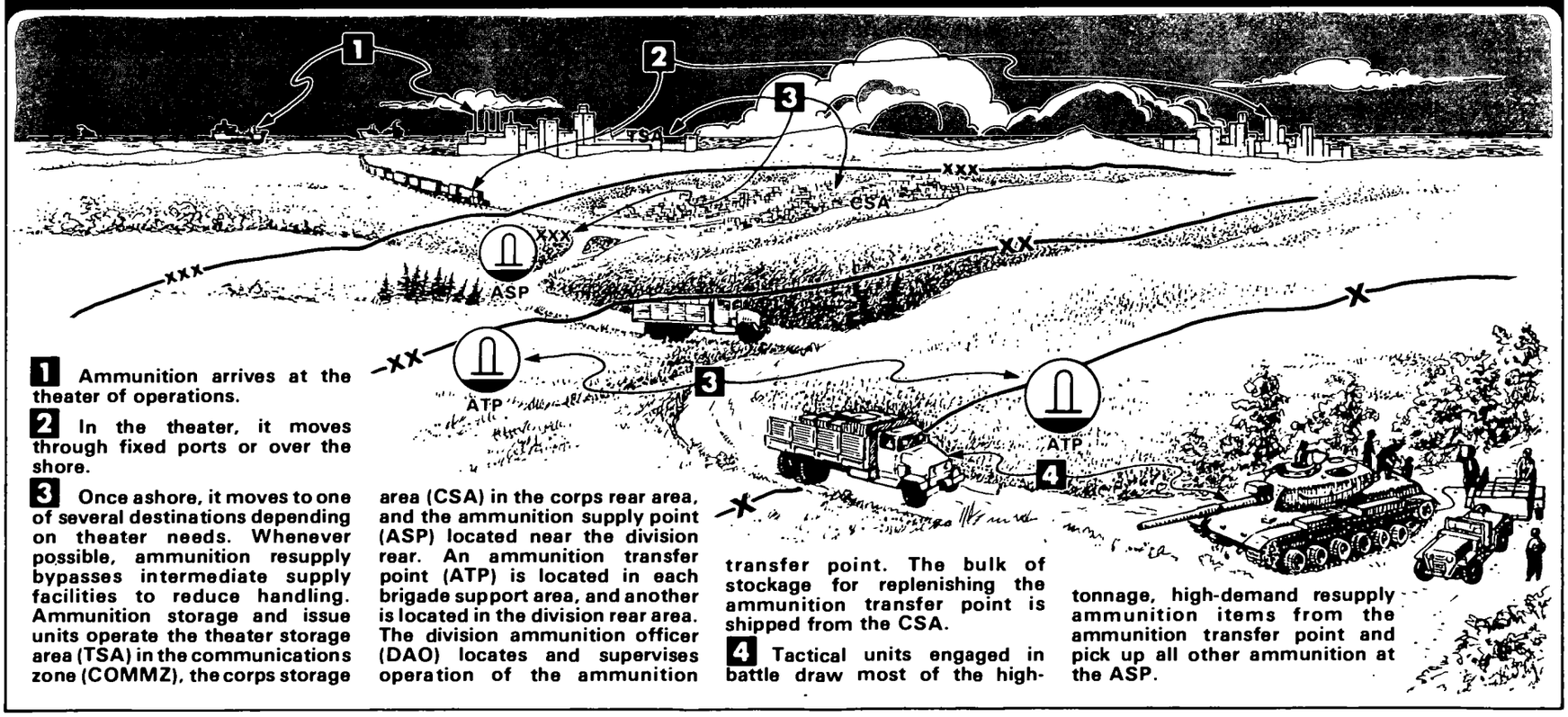
The basic load is carried into battle on the unit's cargo vehicles, on combat vehicles, and with the individual soldier. Standing operating procedures should prescribe distribution of the basic load.

Resupply

To determine the requirements for a specific operation or time period, combat units develop a required supply rate (RSR) for each type of ammunition. Expressed as rounds per weapon per day, the RSR may derive from experience or from reference manuals. The operations officer (S3 or G3) prepares the RSR for the commander during the planning stages of the operation. Requests are consolidated at each level until they reach the highest Army headquarters in the theater (corps, TA). At that level, the G3, G4, and commander review the requirements and availability of ammunition. Based on this review, the commander establishes a controlled supply rate (CSR), the actual resupply rate. The CSR is expressed as rounds per weapon per day by ammunition item. Those ammunition items for which the CSR is less than the RSR will normally be identified in the appropriate annex of operations orders or in CSS plans or orders. After consulting with their operations and logistic staff officers, commanders will normally establish priorities for the allocation of ammunition.

Timely resupply of ammunition is critical. Basically, it occurs in the four-step sequence illustrated below.

AMMUNITION SUPPLY PROCEDURE



1 Ammunition arrives at the theater of operations.

2 In the theater, it moves through fixed ports or over the shore.

3 Once ashore, it moves to one of several destinations depending on theater needs. Whenever possible, ammunition resupply bypasses intermediate supply facilities to reduce handling. Ammunition storage and issue units operate the theater storage area (TSA) in the communications zone (COMMZ), the corps storage area (CSA) in the corps rear area, and the ammunition supply point (ASP) located near the division rear. An ammunition transfer point (ATP) is located in each brigade support area, and another is located in the division rear area. The division ammunition officer (DAO) locates and supervises operation of the ammunition transfer point. The bulk of stockage for replenishing the ammunition transfer point is shipped from the CSA.

4 Tactical units engaged in battle draw most of the high-tonnage, high-demand resupply ammunition items from the ammunition transfer point and pick up all other ammunition at the ASP.

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The acronyms pertinent to the CSS procedures illustrated in this chapter appear below.

APOD	*aerial port of debarkation*
APOE	*aerial port of embarkation*
ASF	*aeromedical staging facility*
BSA	*brigade support area*
CPOC	*Corps Personnel Operations Center*
CSH	*Combat Support Hospital*
DARCOM	*United States Army Materiel Oevelopment and Readiness Command*
OLA	*Oefense Logistics Agency*
OMMC	*division materiel management center*
DSA	*division support area*
DSU	*direct support unit*
FARP	*forward arming and refueling point*
GRREG	*graves registration*
GSA	*General Services Administration*
GSU	*general support unit*
MASF	*mobile aeromedical staging facility*
MP	*military police*
MRO	*materiel release order*
NICP	*national inventory control point*
OSRC	*Overseas Replacement Command*
P&A	*personnel and administration*
PERSCOM	*personnel command*
PS	*personnel service*
RRO	*replacement regulating detachment*
TAPOC	*Theater Army Personnel Operations Center*
ZI	*zone of interior*

Special Ammunition

To fight effectively, combat forces may require nuclear and chemical special ammunitions. The national command authority (NCA) controls their allocation to overseas theater commanders based on—

- **The mission.**
- **Assignment of delivery units.**
- **Availability of items.**
- **Operational requirements.**
- **Other considerations.**

When use of nuclear weapons is authorized, a nuclear special ammunition allocation is established for planning purposes. It specifies the numbers and types of nuclear weapons a commander may expend during a stated period. The prescribed nuclear load (PNL) is the specific amount of nuclear ammunition a firing unit will carry depending on its mission, the tactical and logistical situation, and its ability to transport and to fire the load. Prescribed nuclear stockage (PNS) is the specific amount of nuclear ammunition placed in an ammunition supporting unit or installation. Like the PNL, it is based on the tactical and logistical situation and on the unit's ability to receive, store, maintain, and issue the ammunition. *Stockage is not supplied in a fixed amount or at a fixed rate, and resupply is not automatic.*

Chemical special ammunition allocation designates the chemical ammunition a commander may use when such ammunition is authorized. Chemical ammunition stockage specifies the quantity of items to be stocked in a storage unit or installation. The command decision to establish and replenish this stock depends on the tactical and logistical situation and on the unit's ability to perform the special functions required.

Petroleum, Oils, and Lubricants. The CSS system maintains combat capability by providing bulk POL supply and resupply.

Bulk POL

A dedicated supply system manages, transports in special containers, and issues the supply of bulk petroleum. As long as fuel is available, it moves on demand to refill storage containers of subordinate units. The initial allocation derives from estimates that using units develop based on experience or standard planning data in FM 101-10-1. Such estimates should consider special factors, including terrain and weather and the type of mission. Forecasts are refined and consolidated at the brigade, forwarded to the division MMC, and then forwarded to the corps MMC.

Established requirements are compared to force capabilities. Tactical battalions have limited storage and distribution capabilities—fuel tankers, tank and pump units, and trailer-mounted pods. The supply and transport battalion of the DISCOM has a greater capability in its storage bladders, containers, and petroleum tanker trucks.

Resupply

Resupply follows a seven-step procedure as shown on the next page.

Other Supplies. The CSS system maintains combat capability by providing—

- **Rations.**
- **Water.**
- **Clothing.**
- **Personal-demand items.**
- **Individual and unit equipment.**
- **Fortification and barrier materials.**
- **Major end items of equipment.**
- **Repair parts.**
- **Items intended to support nonmilitary programs.**

Medical supplies and equipment are provided through medical channels.

Normally, the wartime supply system for materiel provided by surface in a fully developed theater follows an established sequence such as shown on the next page.

Normally, the wartime supply system for items provided by air lines of communication (ALOC) in a fully developed theater also